2: Timoshenko S-4, 5 (no date) 1919 RD1 Ukraine RD2

Ukraine and Russia

A Survey of Their Economic Relations

It has long been contended that the Ukraine could not exist as a separate state. It is said her economic interests are so largely dependent upon those of the old Russian Empire that if separated therefrom, she would lack the economic strength to form a viable entity, and thus would render herself liable to decline or gradual absorption by some other state. In the light of present facts, both economists and impartial statesmen will find that this argument, which, among members of the opposing faction, seems to form the primary basis for objection to Ukraine's independent statehood, will not bear even the most superficial investigation. 000

Ukraine's Richness in Natural Resources

The Ukraine is a country with nearly 50,000,000 inhabitants, and possesses within its limits the most fertile lands of Europe, which, every year, feed the western countries from their enormous surplus of cereals, of cattle and of sugar. It is a country which stands fifth in the world in its production of coal and iron; which has at its disposal quantities of other raw materials, such as naphtha, magnesia, salt and mercury; which has, moreover, several hundred kilometers of water front. If, with all these natural advantages and wealth, the Ukraine cannot enjoy an autonomous life, how, then, can one explain the existence of Italy, Spain, Roumania and many other European countries in which the natural conditions are far less favorable to economic independence? [illegible] 433 000

These facts have gradually become so self-evident to the public mind that oppositionists are being forced to abandon their former line of argument, and are now beginning to attack the question from the reverse standpoint. They now claim, not that Ukraine cannot form and maintain her economic unity, but that Russia cannot live without Ukraine, and that, without Ukraine, Russia would lack

504 Let us compare for a moment the regions for which the Black and the Baltic Seas serve as ports. That for which the Black Sea affords an outlet does not extend more than 500 or 600 kilometers, while that served by the Baltic ports reaches as far as western Siberia. Thus, the Baltic region exceeds that of the Black Sea by several thousand kilometers.

000 Surely these facts, coupled with even the most cursory consideration of the Russian imperialistic policy, show beyond a doubt that in respect to the direct economic utilization of the southern ports, the setting up of a separate government by the Ukraine does not obstruct any fundamental interests of the Russian people. Briefly stated, Russia proper does not use directly the southern ports except Rostov, which is the outlet of the region of the Don and in part of the lower region of the Volga, but there is not such a vast difference between the Russian and Ukrainian interests that these minor details as to a common use of various ports can not be conciliated by special agreement.

Coal Fields of Ukraine Not Necessary to Great Russia

311 433 Proceeding directly to the third and last question, that involving coal and iron, we are confronted first of all with the geographic fact that it is really within the ethnographic limits of the Ukraine that are found nearly all the coal fields of Donetz, as well as most of the productive centers of anthracite. More than 90 per cent of the total output of coal of the Donetz basin, during the last years of normal exploitation, came from the Ukrainian regions, while the total production of coal of the Donetz basin reached 70 per cent of the general production of coal of the old Russian Empire, and we may increase this to 85 per cent, if we do not include in the total the output of Russian [438] Poland. Notwithstanding these percentages of production, the general statistics of railroad traffic, together with the data collected by the Special War Committee on the Supply of Fuel, show that nearly four-fifths of the Ukrainian coal and anthracite was used in Ukraine, one-fifth only being exported to Russia.

SU 241 451 439

an effort to lower the tax on manufactured articles, the European countries began to put exorbitant duties on Russian agricultural products. Subsequent records show how detrimental was the Russo-German treaty of 1904 to agriculture among the Russian peoples. Thus were the interests of the agricultural regions clearly sacrificed to the interests of a few industrial centers.

Policy of Former Russia Injurious to Ukraine

U 439 ● 433 SU 439 433 SU 438]

How did this affect the Ukraine? We have shown that, in former Russia, the Ukraine was the principal exporter of agricultural products, and that she could not find a market for her wheat in industrial Russia because of the stern competition offered by the Volga and Siberia. Hence her only course was to seek an outside market, and this she did by exporting all surplus cereals to western Europe. Even here Russia subordinated the Ukrainian agricultural interests to the interests of industrial security. Added to this injustice, she took no steps to encourage Ukrainian exportation into central Russia. Money was spent in constructing elevators in the region of the Volga and in Siberia and refrigerator trains were organized for shipping meat, poultry, butter and fruit into eastern Russia, Siberia and Central Asia: all this to the neglect of Ukrainian interests. Nor was there any compensation for this loss by the promotion of the manufacturing industry in Ukraine. It is an indisputable fact that Ukrainian manufactures are much less developed than those of either Russia or Russian Poland. We can find one reason for this, however, in a certain period of Ukraine's history.

000

Russia and Poland were already enjoying an assured and peaceful national life while Ukraine was still struggling against the factors which were devastating her territory. The colonization of certain Ukrainian territories after the expulsion of the nomads took place much later than that of the other Russian provinces. Later, Ukraine was invaded by the Poles, who did not cease to treat her like a colony, and exploited her entirely for their own benefit. Hence, at the time of Ukraine's incorporation into Russia,

2: Timoshenko S-4, 5 (no date) 1919 RD1 Ukraine RD1
Soviet Union R1

U 433 SU 433 Hence, at the time of Ukraine's incorporation into Russia, the latter had industries, while Ukraine had none. To add to the difficulties already surrounding her industrial initiative and development, Ukraine, being included in the same customs frontier with Moscow and Warsaw, was forced from the very first to compete with districts industrially much stronger than herself. Thus, while Ukraine remained a colony of Russia, her growth was thwarted and checked rather than fostered by the mother country and was in danger of the same fate that overtook Ukrainian Galicia, which was smothered in the custom frontiers of Austria, and remained a colony for the industries of German Austria.

100 We cannot stop with a consideration of commercial policies alone in seeking to discover the Russian agencies that were unfavorable to the economic interests of Ukraine, for there are many other matters to be studied, if one is to give a clear and unbiased perspective of the true situation.

Over-centralization in Former Russia

SU 642 Results show that the guiding principle of all Russian policy was centralization, absolute and unqualified. Even the most insignificant orders of the State, which were to be carried out thousands of miles away from the center of the empire, could not be passed except by the agreement of the central government in Petrograd, which, from the very nature of affairs, understood little of the needs and condition of the people upon whom they were to be inflicted. Naturally, the only beneficiaries were the manufacturers, contractors or intermediaries who were in favor at court and near the antechambers of the ministries, while the interests having no headquarters at Petrograd stood little chance of securing any orders from the State. Because of these conditions, the administration of all the important enterprises—factories, banks, insurance companies and similar organizations—was located in Moscow or Petrograd. Even mills and factories were often located in inconvenient points, simply because they were nearer the center of things. The higher branches of technical education were likewise centralized there.

3: Mirchuk
433, 311, 471, 438

Ukraine RD1

[For location of mineral deposits and other raw materials and indications of their importance to the economy of Ukraine, see category 116, pp. 146-188. For location and productivity of various industries, see pp. 164-188.]

the Don which continued to Ityl, the Khazar capital at the mouth 487 of the Volga where two important routes terminated, viz. a caravan road from Bagdad via Khovaresm in the Turkestan of to-day and a road from China via the basin of the Tarim. Communicating routes led via the Pripyat to the Memel and Vistula areas, and via Halych to Hungary or via Cracow to Prague and Regensburg.

But Ukraine forfeited these advantages when Bagdad, Byzantium and Kyiv declined and when the Crusades shifted the main trade routes to the Mediterranean and later when America was discovered and the sea route to India became known. In addition, there were changes in the needs of civilisation; instead of furs, wax and honey, there was now a demand for goods in bulk like grain and timber which had to be transported all too expensively to the West via the Baltic as the Turks blocked the exit to the Mediterranean. The early golden age of Ukraine was the result of favorable trade conditions and it sank when these changed.

4. Black Earth and Granary

The enormous area of 70 million ha black earth produced 433 considerable surplus grain crops. Ukraine became the granary of Europe, but as the structure of the country was wholly agrarian, industry was slow to develop so that towns and industry were flooded by aliens.

Grain was exported in ancient times to Greece and Rome. 439 Grain and cattle were transported from the central Dnipro area to the harbors and markets of Germany. But export trade only began to flourish in earnest when the fertile steppe and the sea coast were re-conquered. Food requirements of European industrial states were supplied from harbors on the Black Sea and the Sea of Oziv; and yet this improvement in geographical trade conditions was no longer the decisive feature in Ukrainian economy.

Ukraine was responsible for 10 % of the world's production of the four European kinds of grain and was therefore among the leading sources. From 1909—1913 its grain exports accounted to 8.6 million roubles, and to more than a fifth of the entire

439 world export of grain; Ukraine played a leading part in the export of wheat, rye and barley (20.21 % and 25 % respectively of the world export).

The bulk of the exports did not go to Russia which drew its supplies from the Volga Basin and the East. Part went to White Ruthenia, Poland and the Baltic, if it was not ear-marked for Central and Western Europe. And Ukrainian cattle were not greatly in demand in the Russian market, which is one reason why cattle-rearing never developed very satisfactorily.

5. The preponderance of foreigners in industry

433 464 was partly due to Ukrainian concentration in agriculture. It is quite true that, at the outset, Ukraine was not interested in mining and industry. On the other hand the Russians, by Nature less bound to the poorer soil on which they had settled immigrated to mining and industrial areas of Ukraine. This produced dangerous national islands. The work done by Ukrainian laborers in the Donets area was better than in the Ural, even if it did not reach the standards of Central and Western Europe.

471 In Ukraine industry foreigners predominated even more as investors of capital than as laborers, more capital coming from countries abroad than from Russia. Before World War I about 400 million roubles were invested in Dnipro Ukraine alone, where the value of mining and industrial products amounted to 170 million roubles. 95 % of the capital invested in heavy industry was of foreign origin; 80 % of the pig-iron produced in 1913 came from 10 concerns with French capital (out of a total of 16 in the Russia of those days); they represented an investment of more than 112 million roubles. Of the 103 million roubles of French capital invested in coal mines, 82 millions were accounted for by the Donets Basin. Ten of the 12 concerns run with Belgian capital were in Ukraine.

6. Ukraine's relations to Russia as a colony

439 find expression in the economy of Dnipro Ukraine where certain industries were neglected and deprived of funds in favor of Russian areas. And this is no result of a balance between an agrarian and an industrial country for it was not to the North and the East that agricultural produce was exported

131 Eurasia and the ores in the Ural is more than 2000 km; the 487 coal of the Donets Basin, on the other hand, is about 350—450 km from the iron ore of Kryvyj Rih, while the iron and manganese ores of Kerch are nearer still. The seas in the north of Russia are frozen for 20—26 weeks, while the Black Sea has ice for but 3—4 weeks in the year. Most of its harbors can be kept open all winter by means of ice-breakers. [161] The density of the population in Ukraine is 59 to the square kilometer which cannot be compared with the figures for Siberia (1 per sq. km) or with the average for USSR (8). Conditions in Ukraine, therefore, are much more akin to those in Europe than are those in the continental heart of Eurasia some 4000 km away. And for Ukraine this fact found expression, for instance, in the fact that it could not profit from the reduced railway freights that were granted for long-distance transportation. The unfavorable position of Moscow and Leningrad as manufacturing centers was a great handicap to the economy of Ukraine which possessed all the conditions necessary for production within its own frontiers but nevertheless had to import goods from there and export raw materials to very low prices.

As long as Russia's face was turned towards Europe, these considerations did not matter much, but they are felt all the more acutely now that the economy of the Soviet Union is definitely planned.

8. The Ukrainian idea of economy

421 with its championship of private property was always entirely different from the "mir" idea, with its farming in common and periodical division of the soil which was characteristic for Russian economy. Exceptions within Ukrainian territory, due to special conditions of time and place, do not alter this fundamental fact. [566] That serfdom should have been abolished so late was felt to be a great burden by the Ukrainian who had enjoyed personal freedom in his days of political independence. He always connected serfdom with Russian rule which naturally did not help to mitigate his aversion to everything Russian.

● 433 In national Ukrainian literature, the relationship of different branches of economy is often discussed. It is often maintained that up to the present, development has been along the lines of

Increasing industrialisation. Extensive exports of agricultural produce, we are told, are not good for a fairly densely populated country. This call for intensive industrialisation is common to the otherwise diametrically opposed groups of nationalists who dream of self-sufficiency, and of disciples of the Bolshevist Eurasian school.

One-sided industrialisation is an extravagant program, for the country of the Black Earth will, of course, always remain agrarian in character. Increasing industrialisation and the growth of the home market will intensify agriculture, though not in the usual sense, as the nature of the steppe stands in the way. It will pay to solve the problem of the arid areas and production will be increased.

In a purely liberal economic system Ukraine would, of course, have to cease being a country of extensive agrarian exports and dumping great quantities of grain on the market at a loss. But now that international commerce is planned, it is neither necessary that Ukraine should supply the world market with the great quantities of the years preceding the First World War nor that agricultural countries should be forced to sell produce at dumping prices or to other malpractices.

It would considerably strengthen the economic independence of Europe to include Ukraine as a source of agricultural produce and as an industrialised and solvent customer. The economy of Europe will find its necessary complement in a Ukrainian system that is adapted to European needs and not diverted to form part of a Eurasian scheme.

3: Mirchuk S-4 (no date) 1949 RDl Ukraine RDl

Agriculture

1. Agricultural Features and Overpopulation

162 The agricultural overpopulation of Ukraine is a result of its one-sided social and economic structure. In Germany the rural population forms 29 % of the entire population of the country, while the figures for the agrarian countries of Denmark and Hungary are 30 % and 25 % respectively, the corresponding figure for Ukraine being 75 %. The density of the agricultural population in Ukrainian territory amounts to a general average of 54 per ha of agriculturally utilised soil, in the Right Bank Region and in Western Ukraine to 80, and in Galicia to 103. In Denwark, the model agricultural country, the density of the agricultural population is not even 35 and in Bohemia, where agriculture and industry are highly developed, 241 it is only 52. And yields per ha in Ukraine are fairly low: 433 statistics for 1931—35 are as follows (q/ha):

Country	Wheat	Rye	Barley	Oats	Average
Ukraine	8.5	8.8	8.3	9.2	8.7
Roumania	9.6	10.1	10.3	9.7	9.9
Hungary	13.5	11.8	14.1	12.3	12.9
Germany	21.0	17.4	20.1	19.5	19.5

Agricultural overpopulation is particularly noticeable in view of the small share of agricultural land per head of the rural population (not quite 2 ha). Produce is therefore exported at the expense of the standard of living which actually used to be lower in Ukraine than in the European states that imported the produce.

In the years immediately preceding the Second World War yields per ha in Dnipro-Ukraine seemed to have risen

considerably. For 1938 the average figure for grain was given 241
as 10.9 q/ha, for 1939 = 13.9 q/ha, for 1940 = 19.5 q/ha 433
("Visti" of 11. II. 1941). The average for those three years would be 13 q/ha, higher by 50 % than the average for 1931—1935. As these data were compiled for a meeting of the communist party, a tendency to propaganda must be borne in mind; even in official Soviet statistics, final figures are often more modest than those just quoted. But, in spite of an undisputed increase in yield, the economy of Ukraine must either be strengthened or increased, or both, if it is to be healthy.

2. Soil and Climate

Ukraine contains 44 % of the Black Earth in Europe (160.5 134
million ha) and almost 8 % of that in the whole world (900 million ha) and is one of the largest Black Earth areas in existence. In Ukraine itself $^{3}/_{4}$ of the entire soil is Black Earth and only $^{1}/_{4}$ podsol earth, mountain soil and the good renzine soil of Galicia. Podsol earth predominated in Podlakhia, the Kholm district, North Volynia, in Galician Subcarpathia, in the flats round the Syan and the Upper Buh, in Polesya and partly in the district of Chernyhiv.

Black Earth is one of the best soils and excellently suited to grain. Its humus content is high, its structure crumbly and it is extremely porous. The humus binds certain quantities of moisture which are distributed fairly evenly. Black Earth dries quickly on the surface but lower down it retains moisture for a fair time, even during drought. It preserves its natural fertility for a long time, does not call for any complicated preparation and is easy to work. It requires no manure which may be positively bad for it and even when exploited, the soil preserves itself, so to speak. It needs a relatively small amount of seed.

It is not necessary to have any specially developed agricultural 241
implements on Black Earth: motor-plows and power-driven agricultural machinery are eminently suitable for the great plains that all demand the same treatment. That is why the tendency to mechanisation and to introduce big-scale operations is particularly marked in the Black Earth areas.

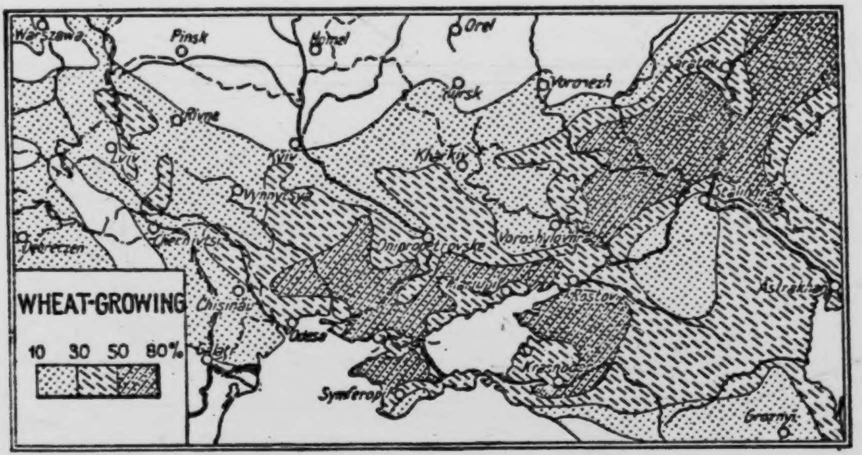
5. Other Agricultural Produce.

244 ● 433 In Western Ukraine potatoes account for 16—18 % of the arable land, decreasing towards the south-east to 3—2%. There has been a considerable increase in the cultivation of potatoes of recent times on the small property belonging to private or to collectivised peasants. The yield per ha which before World War I amounted to 92 q sank in the years 1929—1933 to 86 q (Belgium 213, Germany 156, France 110, USSR 80, USA 72). Its total production of 20.6 million t, 10 % of world production (205.6 million t in years 1931—35) puts Ukraine fourth after Germany, USSR (exclusive of Ukraine), and Poland (exclusive of Ukrainian territory).

249 433 Sugar beet is the most important technical culture. It is grown mostly in the center of Dnipro-Ukraine where the rainfall is 500 mm, above all in the area round Kyiv and in Podolia. The average area planted in the years from 1901/02 to 1910/11 amounted to 555 000 ha and the total yield to 85 million t (154 q/ha). In 1935 Ukraine, with a sugar beet area of 952 000 ha, was the first country in the world as regards this product.

And yet the yields per hektar have decreased to 90 q, the average for 1931—35. In Germany the corresponding figure is 290 q/ha, in Denmark 322 q/ha, in Holland 350 q/ha, in the USSR 84 q/ha. The reason for the decrease is to be sought in the Soviet form of management. With an entire yield of 8.8 mil-

[243]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Debreczen
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Dnipropetrovske
Voroshylovhrad
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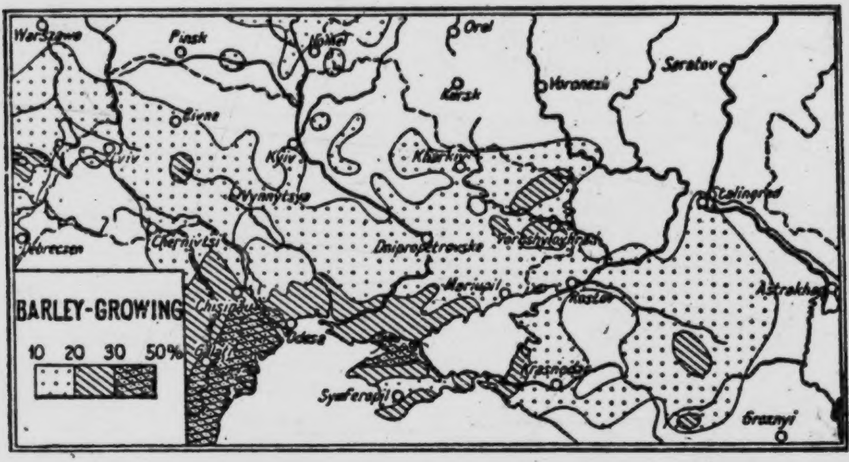
Rostov
Astrakhan
Chisinau
Odesa
Galati
Krasnodar
Symferopil
Groznyi
WHEAT-GROWING
10 30 50 80%

lion t and 14 % of the world production of sugar beet, Ukraine comes second after Germany (10.6 million t) and before France and the USA (8.2 and 8.1 million t respectively). 249 433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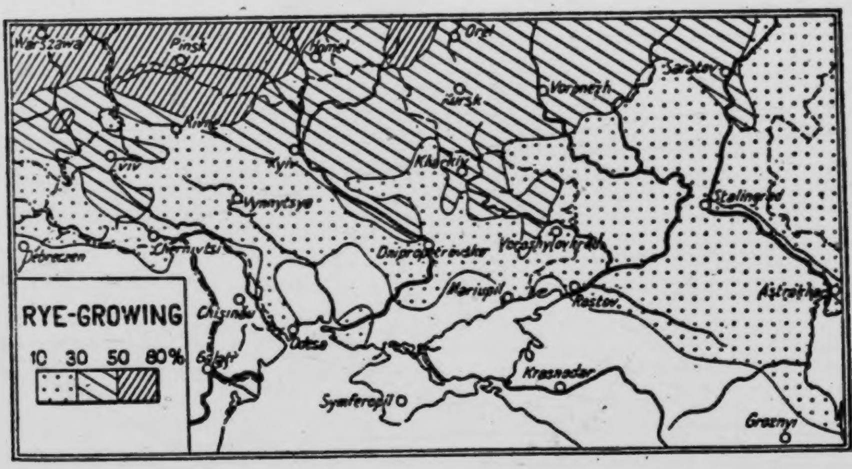
Odesa
Galati
Krasnodar
Symferopil
Groznyi
BARLEY-GROWING
10 20 30 50%

[243]

Conditions for growing tobacco in Ukraine are favorable, but the area planted, which in 1908 was 50 000 ha, has not been increased; the yield has risen slightly (8 000 t in the entire country). Better qualities were planted in the south, and elsewhere the well-known "makhorka". Hops of good quality were grown in Volynia and partly also in Galicia; 2 000 t were harvested. 249 433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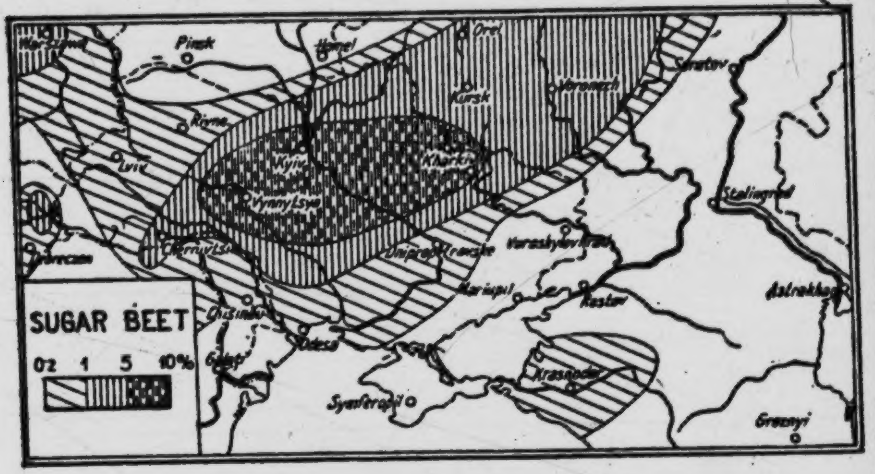
Voroshylovhrad
Mariupil
Rostov
Astrakhan
Chisinau
Galati
Odesa
Krasnodar
Symferopil
Groznyi
RYE-GROWING
10 30 50 80%

[243]

3: Mirchuk S-4 (no date) 1949 RD1 Ukraine RD1

248 Hemp is produced above all in the Chernyhiv area (229 000 ha), ● 433 Ukraine coming after the USSR in hemp production of the world; in the years 1931—35 its fibre yield was 13 % (8 000 t)

[249]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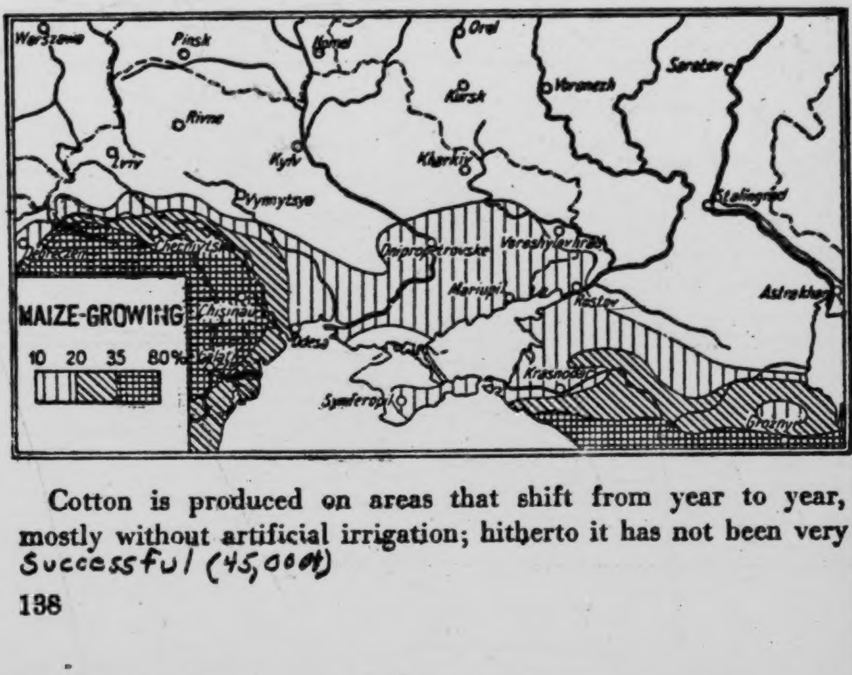
Odesa
Galati
Krasnodar
Symferopil
Groznyi
SUGAR BEET
0.2 1 5 10%

and its seed yield 19 % (420 000 t) of the world production. Flax is grown on an area of 230 000 ha; Ukraine with a yield of 60 000 t stands second in world production of fibre flax (9.4 % of 640 000 t) while it is sixth as a producer of flax for seed, its yield of 71 000 t being 2 % of world production (3.5 million t).

[243]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MAIZE-GROWING
Chisinau
Astrakhan
Rostov
Odesa
10 20 35 80%
Galati
Krasnodar
Symferopil
Groznyi

Cotton is produced on areas that shift from year to year, mostly without artificial irrigation; hitherto it has not been very Successful (45,000t) successful (45 000 t). Sunflowers were cultivated in 1935 on an area of 1 659 000 ha, mainly in the Kuban area. The yield for 1930—35 (0.9 million t) was only a little less than that of the USSR and much more than that of any other country. 247

As a grain producing country, Ukraine, with its yield of approximately 25 million t of the four main European varieties (= 10 % of world production), took a leading place in the years before the First World War (1909—1931). It exported 7.9 million t, or 1/5 of total world grain exports, topping the list for wheat and barley (4.3 million t, and 20 % and 2.7 million t and 43 % respectively of world exports). In the years 1931—35, production in Ukraine decreased by only 9 % i. e. by 24.6 million t, world production amounting then to 276.6 million t, while the decrease in export trade in the same period was much greater. The reason for this was the small yield per hektar as well as inadequate cultivation in consequence of collectivisation and unfavorable conditions for selling agricultural and buying industrial products; in addition there was an increased demand at home as the country became more industrialised. 433 243

6. Cattle Rearing

The distribution of livestock in Ukraine varies considerably. In the wide spaces of North Caucasia there is much pasture-land so that there are not many cattle per unit of area, though quite a number per head of the population. 231 433 811

The opposite is true of Galicia where management is intensive. The many meadows of Polesya support good stocks of cattle while the mountain pastures of the Carpathians are not sufficiently utilised. Between those extremes we have the bulk of Ukrainian arable land with relatively poor supplies of fodder for cattle. The result is that Ukraine does not contribute to the cattle rearing industry of the world what one might expect from a country of its agricultural standing. Before World War I there were 13.5 million head of cattle in Ukraine, i. e. 2.8 % of world stock. The proportion of dairy cows in this figure increases continuously as the use of oxen for draught, which used to be a characteristic feature of the country, had been declining for some time. (Table 3).

231
●433

Table 3. The Livestock in Ukraine (1912—1937) in Million of Head.

	1912	16	20	23	24	25	26	27	28	29	30	31	32	33	34	35	37
cattle	6,5	7,7	6,8	7,1	8.3	8,9	8,4	8,4	8,6	7,6	6 3	6,2	5,0	4.4	5,3	6,3	7,8
cows	2,6	3,1	3.7	3,7	3,7	3,9	3,9	3,9	4,0	3 9	3 5	3,4	2,7	2,4	2,5	2,6	3,5
horses	5,6	5,5	3,9	3,8	4,0	4,2	4,6	5,1	5,5	5.6	5 3	4,8	3,7	2,6	2,5	2 6	3,5
pigs	4,3	4,6	5.3	2,4	4,2	3,7	3.7	4,4	7 0	4,2	3,2	5,4	2,6	2,1	4,2	4,7	7,7
sheep	6,2	6,4	6,9	8.4	9,3	9,7	8,7	8,0	8,1	7,0	4,5	3,4	2,1	2,0	2,2	2,8	3,8

In 1912 the number of horses was disproportionately high, viz., 7 millions. With the increasing use of motors, this number was reduced which, from the point of view of economy, was perfectly justifiable. Pig breeding, on the other hand, tended to increase, particularly in the north-west and the Kuban area. In spite of that, there were before World War I only 7.1 million pigs in the country, i. e. 4 % of world stock.

Sheep breeding has declined as a result of intensive management and competition from overseas on the world wool market, above all in fine wools.

Dnipro Ukraine statistics for the year 1916 provide characteristic material for judging the general development as well as the present position. Except for horses which had stopped increasing even before 1908, the figures for 1916 were only temporarily reached in the last year before the series of Five Year Plans. Diagrams 1 and 2).

[474] Collectivisation measures by the Soviets were a great blow to cattle rearing in Ukraine. Rather than hand over cattle to the State for nothing, the peasants slaughtered their stocks wholesale; and, as a result of bad treatment, epidemics and poor feeding, the cattle stocks of collective enterprises greatly declined. In 1933 the number of cattle and horses was only half what it had been in 1928 and pigs and sheep less than a quarter, while the entire stock had been reduced to 2/5, or 38 %. It was only after the colkhose peasants were allowed to keep cattle of their own, that numbers began slowly to rise, though they did not reach the level of 1928.

In Western Ukraine the development of stock-keeping was much more favorable, but the number for the whole of Ukraine was below prewar level, except in the case of pigs.

3: Mirchuk S-4 (no date) 1949 RDl Ukraine RDl

231 Cattle trade and management in Ukraine in general are far
433 from satisfactory, though there was a well organised cooperative dairy system in Galicia; butter was even exported. On both sides, particularly in the south of the Carpathians, the production of cheese made good progress. Any export of meat that there was, is partly a result of the small demand for home consumption. Though poultry farming was neither intensive nor sufficiently progressive, a considerable number of eggs was exported.

Industry and Mining

1. Fundamental Facts

● 433 It lay in the nature of her situation as a colony of Russia that only those branches of industry in Ukraine were promoted which utilised raw materials that were locally abundant and difficult to transport over long distances. It was impossible, for instance, to develop a modern textile industry. Even if it cost twice as much to transport cotton from New York to Moscow via Murmansk as via Odessa and Kharkiv and even if the industrial area in Central Russia had to import coal from the Donets Basin, Ukraine was nevertheless dependent on Russia for manufactured goods.

433 311 464 Labor was originally more plentiful in Russia than in Ukraine. The population on the upper reaches of the Volga and the Oka was more apt to seek employment in trade and industry, as the soil in those areas yielded poorer harvests and the percentage of forest land was higher. In Ukraine, on the other hand, farmers were loth to leave the good Black Earth. And that is why it was long impossible there to make labor a decisive factor in placing industries. This could be done only much later in the larger towns, and even then it made little difference to the general trend. But it is characteristic for Ukraine that sources of raw material have determined the location of industry, coal-mines and hydro-electric works being geographically fixed and altogether there are more industries, the raw materials of which are more difficult to transport than their products. The proportion of plants whose location is determined by the presence of raw materials is three times higher in Ukraine than in the industrial states of Central and Western Europe.

4: Allen H-4 (no date) 1941 RD1 Ukraine RD1

000 problem. The lightning rapidity of the economic development of the South of Russia, which even the revolutionary events of 1905 could not stop, attracted the attention of German specialists.

433 ● Two years before the war a commission of German economists and technicians under the presidency of Professor Auhagen visited Southern Russia and made a report to the German Government. The members of the commission were particularly impressed by the progress of the metallurgical and beet-sugar industries. The large investments of French and Belgian capital in the coal and metallurgical industries did not escape their notice, and they anticipated a flow of British capital following the Anglo-Russian Agreement. Professor Auhagen came to the gloomy conclusion that 'if some untoward event does not stop this rapid Russian development, Germany will soon be faced by a neighbour more powerful than herself'.

000 This economic development attracted the attention of the promotors of German *Weltpolitik* to the possibilities of Ukrainian separatism. Very exaggerated hopes of revolutionary and separatist movements in Russia inflated the mind of the Emperor William, who was encouraged in his miscalculations by the German Ambassador in Petersburg, Count Pourtalès.

In his memoirs (*Aus meiner Dienstzeit*, IV, 197 *et sqq.*), Field-Marshal Conrad recalls a meeting at which the Emperor William refused to listen to the objections of the Austrian Chancellor, Count Stürgkh, and insisted on 'revolutionizing' the populations of Russian Poland and the Ukraine. The Emperor proposed 'to use all means for this purpose and to send there tracts, emissaries and large funds'. The Emperor's amateurish excursion into the technical problems of organizing separatist diversions formed the basis of the so-called 'Pontus Expedition' (which was to include within its scope the raising of an insurrection among the Kuban Cossacks and the formation of a 'Georgian Legion' for action in the Caucasus). The Emperor urged that the Austro-Hungarian fleet should join the *Goeben* and *Breslau* in the Black Sea where, after panic had been spread among the population of the South Russian coasts, agents should be landed 'in lonely places', well supplied with money and revolutionary literature, with the object of organizing riots in the Ukraine in the rear of the Russian armies. The objections of Field-Marshal Conrad and of the Austrian Admiral Haus prevented this fantastic 'embryon' of the future 'manœuvre' of sending Lenin and Trotsky into Russia from being carried into effect (see also the memoirs of the Austro-Hungarian military attaché in Istanbul, General Pomiankowski, *Der Zusammenbruch des Ottomanischen Reiches*, pp. 80 *et sqq.*).

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CHAPTER VII

THE ECONOMIC HISTORY OF THE UKRAINE

§ 1. AGRICULTURAL HISTORY OF THE UKRAINE

In the political mythology of the twentieth century the legend 439 about 'the vast riches of the Ukraine' has played, and is destined to play, a certain part. In history the Ukraine will take place with the Route to the Indies, the North-West Passage, Golconda, the Empire of Prester John, and other phantasmagorias of the human mind which in their time have inspired the nations to the drama of effort and the tragedy of conflict.

In the modern world where generalization has displaced religion and where the generation made literate by popular education has thrown up 'Leaders' who are adepts in the exploitation of generalized ideas, it was inevitable that movements based on facile and false scientific, geographical and ethnical conceptions should become fashionable. 'The wheat-fields of the Ukraine' form a roseate hinterland to the Nordic Race and the Classless State in the dream-world of the masses of Central Europe. Apart, therefore, from the intrinsic interest of the subject, it becomes a matter of current importance to analyse the extent of the real resources of the Ukraine and their actual and potential relation to the economic problem of Europe.

There exists a widespread idea that the Ukraine was 'the granary 433 of the Russian Empire', but in reality it would be difficult to 311 indicate the period to which this idea could be applicable. Certainly, during the eighteenth century, as the Tartars and Turks were driven from the mouths of the Ukrainian rivers, a period of progressive prosperity set in. But under Alexander I, during the Napoleonic Wars, the bulk of the grain supply of the Empire was drawn from the southern regions of Central Russia—from the Governments of Orel, Kursk, Voronezh and Tambov. This source of supply was adequate in view of the numbers of the population at that period, and the state of the roads between the Black Sea provinces and Central Russia put a prohibitive cost on transportation from the south.

During the reigns of Alexander I and Nicholas I export abroad 439 developed through Odessa and the Azov ports—Taganrog and

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166 ALREADY IN THE EIGHTIES SYMPTOMS OF OVER-POPULATION WERE NOTICEABLE in the Governments of Poltava and Chernigov. The peasants continued to move on into New Russia, but by this time that region was itself becoming fairly thickly populated. Migrants pursued their way to the newer lands in the northern Caucasus and beyond the Volga. From 1890 onwards the Government took a hand in the organization of this migratory movement. According to the Emigration Department, set up at this period, the greatest number of migrants over the whole Empire came from the 'rich black earth regions' of Poltava, Chernigov, Kursk and Kharkov. However, between the years 1907 and 1913, the Poltava and Chernigov Governments, from being first and second in this respect, ranked only third and fifth. This fact is explained by the initiative of important landowners and industrialists like Kharitonenko, Tereshchenko and others who built up the sugar-beet industry on a large scale. Notwithstanding this factor, between 1906 and 1914, according to the statistics of the *Ukrainian Encyclopaedia*, 1,610,000 peasants migrated from the Ukrainian Governments, while migration was also taking place from different districts of New Russia. The Ukrainians mostly went to settle the steppe area in western Siberia and the region of Orenburg; others reached the Amur and the shores of the Pacific Ocean, where the Ukrainian settlements came to be known as the Green Wedge (*Zelëny Klin*) and where the names of the wealthy villages of Novo-Kievskoe, Poltavskoe and Chernigovskoe piously recalled the origin of those who had come from the banks of the Dniepr and the Seym.

311 433 At the beginning of the twentieth century the classical 'three-field system', already prescribed as a law in the Lithuanian Statute of the sixteenth century, prevailed in left-bank Ukraine. This system answered the requirements of the small landowner or well-to-do peasant who farmed 20 to 100 hectares. Few troubled to produce more than a small surplus, the sale of which might cover their current wants. Horticulture, apiculture and some stock-raising served to supplement income. On the larger estates all the energies of the owners were directed to the lucrative exploitation of the sugar-beet industry. Stretches of land were bought or leased from peasants or small landowners in order to increase the acreage under beet. The rapid development and excellent management of the sugar-beet industry impressed and disturbed the German Commission of Professor Auhagen in 1912. By this time the industry had assumed a certain international importance. In 1914
433 there were over 190 sugar factories in the Ukraine out of 226 for the
244 whole Empire (the bulk of the balance was produced in Poland). As against 2 million hectares under wheat in the Ukraine (excluding

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the New Russian Governments) there were over 1 million hectares 433 ●
under beetroot. Just before the last war the annual production of beet in the Ukraine reached 150 million quintals: i.e. 18 per cent of 244
world production. The production of Ukrainian beet sugar ranked fourth—after that of America, Germany and France. In 1913 the Ukraine produced 11 million quintals of crystallized sugar. This output, together with that of the Polish factories, covered all the needs of the internal market (which during the preceding twenty-five years had augmented fourfold) and provided substantial surplus for export to the Baltic and the Middle East.

In addition to the beet processing plants, about 60 per cent of the alcohol refineries (corn, potatoes) of the Empire were located in the [274]
Ukraine. The production of vegetable oil (particularly from sunflower seed) was also important.

It has been estimated by the Soviet paper *Pravda* that approximately 1 milliard of rubles a year was paid for services on the semi-industrialized estates of landowners throughout Russia: of this sum a considerable proportion was paid for the hire of horse transport (since landowners did not maintain a large number of draught horses but hired from the villages). Of this milliard, about 300,000,000 were paid out in the Ukraine. As the peasant population of the Ukraine numbered about fifteen millions, some 20 rubles a year per [511]
head of the population was earned on 'supplementary' work on the large estates. 'Only owing to the sugar and other agricultural industries could the dense population of the Ukraine exist in such comparatively well-to-do circumstances.'

Thus the agricultural economy of Podolia, Volhynia, Kiev, [241]
Chernigov and Poltava was based only partly on the production of cereals. With a population which reached nearly twenty millions, only about 2 million hectares were under wheat, while in New Russia, with a population about half that of the Ukrainian Governments, there were 4 million hectares under wheat. The Ukraine exported only small quantities of wheat to Poland and White [439]
Russia, which provinces drew the bulk of their supplies from New Russia. The real 'granaries' of Russia which supplied the whole Empire and exported a surplus abroad were the regions of the [134]
northern Caucasus and Trans-Volga with western Siberia and New Russia (including the Governments of Kherson and Ekaterinoslav with the northern part of Tauris and the southern part of Kharkov) In those regions the black earth really had a virgin quality during the first half of the nineteenth century; and its richness remains exceptional even now.

As a rule, the climatic conditions in the *New Russian Governments* 000

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land in the Ukraine and New Russia: of 25 million hectares of 241
arable, 6½ million were under wheat, and of these 4½ million were
in New Russia. Ukrainian and New Russian production attained 433
90 million quintals a year, of which 70 million came from the New 241
Russian Governments. (In addition, the Ukraine produced for
internal consumption about 30 million quintals of rye—in the
northern districts—nearly as much barley, and about 20 million
quintals of oats.) The wheat crop of the Ukraine and New Russia
represented 8 per cent of the total world, and 18 per cent of European,
production. With an average production of 70 million
quintals a year, the New Russian Governments could throw an
important surplus on to the world market. Before the Revolution
about 76 per cent of the crop was retained in the villages for food,
storage and seed (on the larger mechanized estates and co-operative
colonies the average was round 70 per cent). The balance, about
20 million quintals, went on the market: of it about one-quarter
was absorbed by the towns and industrial centres of New Russia.
Under these conditions the three New Russian Governments had [439]
available for export abroad 15 million quintals of wheat, i.e. about
1½ million tons. The crop of New Russia and the northern Caucasus
was exported to the Ottoman Empire, Greece and particularly to
Italy, where the 'hard' types of grain were appreciated as an ingredient
of macaroni and other *paste*. Even after the last war and all
the ruin of agriculture resulting from the Revolution, the Soviet
Press, in 1929, could boast that about 1½ million tons of wheat had
been exported through the New Russian and North Caucasian
ports (Professor Brutskus holds that this export—the relation of
which to total production greatly exceeded pre-War proportions—
was one of the factors in preparing the way for the terrible famine
of 1932).

'From remote times the Ukraine and New Russia were famous 231
for their draught oxen. Further, many landowners possessed herds
of foreign cattle, principally Swiss breeds. All the German colonies
bred good milkers' (Shcherbatov). In 1914 there were estimated
to be over 9 million head of cattle, 6 million sheep (numbers of
them of valuable breed) and 5 to 6 million pigs in the Ukrainian and
New Russian Governments (the pigs predominated in northern and
western Ukraine and sheep in the New Russian steppes). South
Russia, an ideal horseman's country, possessed also a vast number
of horses. Before the last war there were reckoned to be 5½ million
horses in the Ukraine and New Russia (1 horse to every 5–6 people,
and one-sixth of all the horses in the Empire). Government studs,
and those of private landowners and of certain *zemstva*, maintained

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231 a high standard of breeding—particularly of draught horses. The Army Remount Department fulfilled a third of its requirements in the south, and there was a considerable export abroad. As a result of the Revolution, breeding suffered probably more than any other branch of rural production. Statistics for 1922 illustrate the disastrous effect of the Revolution on livestock throughout the whole Empire. In 1916 the total head of cattle was about 60 million: in 1922, 23 million. The number of horses in 1916 was estimated at 35 million: in 1922 at 20 million. Sheep numbered 120 million in 1916: 46 million in 1922. In view of the fact that South Russia was the principal field of the Civil War, it is probable that about 50 per cent of the horses and cattle destroyed were lost in this region. It is reckoned that in the Ukraine and New Russia only one-third of the pigs remained and one-quarter of the sheep. Losses in domestic animals are much more difficult to recover than losses in other branches of domestic industry; further, the special conditions of field labour in New Russia required a large proportion of draught oxen and horses.

[656] 433 One of the principal reasons which compelled Lenin to formulate the New Economic Policy was the necessity of restoring the food production of the Soviet Union.

'"War Communism" and attempts to introduce "integral socialism" into the countryside ended in 1922. At that date began the period of "liberalism" in Communist policy in relation to the villages. The peasantry were allowed freedom in the choice of land labour and almost complete freedom in other economic activities. The years between 1922 and 1929 produced excellent results: the lost sowing area was recovered and breeding was resumed. The food question in the country was improving' (Prof. 113 Markov, *Socialist Economy in U.S.S.R.*, Part 2, *Agriculture*, Paris, 1937). By 1929 agricultural production approached pre-war standards (150–160 million quintals of cereals compared with 200 millions average for the years 1909–13). In spite of the fact that, following the break-up of large estates, the peasants had expanded the sown area at the expense of pasture (and according to the *Ukrainian Encyclopaedia* were showing a diminishing average on arable of 15–20 per cent as a result of more primitive methods of farming), the breeding of cattle and horses was nearing pre-war figures and the production of pigs was improving.

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423 1934, and in January of the following year it proclaimed its political
661 and social victory. Reference has been made in the preceding
565 chapter to the social upheaval, the great losses in human life and the
474 redistribution of population incurred during the 'Revolution
[433] against the Peasants'. Losses in natural wealth were also formidable:
during the five years, 1929–34, horses declined by 50 per cent; cattle by 40 per cent; only about half the total number of pigs survived and one-quarter of the sheep.

The first efforts of the Soviet administration had been directed to
415 the organization of *Sovkhozy*—the large Government farms which in effect replaced the 'capitalist' private estates of the pre-Revolutionary period. Grain, beet sugar and stock-raising *Sovkhozy* were set up. In 1934 there were already 10,500 of them, of which 1665 were situated in the Ukraine and New Russia. In 1935 the sown area of the *Sovkhozy* attained 15 million hectares as against 2 million in 1929 (i.e. 10 per cent as against 2 per cent of the whole sown area of the Union). Livestock confiscated from the peasantry stocked these 'model' farms, which soon began to evoke the admiration of urban tourists from the West. The *Sovkhozy* were well supplied with the most modern agricultural machinery: in spite or because of this fact they failed to absorb any large proportion of the rural labour which had been deprived of normal occupation by the new measures. In 1931 only 1½ million people throughout the whole stretch of the Union were employed on *Sovkhozy*: in 1934 nearly 3 million were employed (of which 1½ million were in Ukraine and New Russia).

474 The *Kolkhozy* proved to be a far more important factor in the
661 new agricultural economy. Between 1929 and 1934 all means—
including the most ruthless—were employed to force the peasants on to the collective farms. The number of *Kolkhozy* grew rapidly: in July 1930 only 23 per cent of all farms had been converted into *Kolkhozy*; by the beginning of 1932 the figure was already 60 per cent; by the beginning of 1934 it had reached 72 per cent; and in 1936, 90 per cent. During the last three years individual farmers in U.S.S.R. have almost completely disappeared: the sown area occupied by private farmers amounted to 34 per cent in 1934 and to only 4 per cent in 1936.

474 As a result of the widespread famine conditions and the really
423 serious insurrections which had troubled the authorities in the
656 Northern Caucasus and Trans-Caucasia during the period 1930–32,
and as a result also of the deterioration in the international situation which followed the Nazi rise to power in Germany in 1934, the Soviet Government, in spite of its proclaimed 'victory', found itself forced to modify the principles on which rural collectivization

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had been based. '"Liberal" tendencies began already in 1932 in the 474
sense that *kolkhozniki* (individual members of the *Kolkhozy*) were 423
allowed to keep their own cattle (Decree of 4 February 1932). 656
Subsequently, in 1935, *kolkhozniki* were accorded the right to farm their own private allotments within the boundaries of the *Kolkhozy*.

These modifications in policy soon gave positive results. It is difficult to say whether the *Kolkhozy* have come to be accepted by the peasantry as the permanent basis of rural life. At the same time there can be no doubt that the grant of certain rights of private farming to the *kolkhozniki*, combined with a relatively free market, has tended to a notable improvement in the conditions of peasant life. In consequence food production throughout the whole country has again increased.

There are now four forms of farming in existence side by side in 423
the Soviet countryside:

(*a*) *Sovkhozy* (State farms); 471
(*b*) Individual farms; 433 ●
(*c*) *Kolkhozy* (Collective farms);
(*d*) Allotments belonging to the *kolkhozniki* within the area of the *Kolkhozy*.

The relative importance of these different types of farm can be judged from the areas allotted to each in the 'sowing plan' of 1936: *Sovkhozy* covered 16 million hectares; individual farms, 5 million; *Kolkhozy*, 108 million; *kolkhozniki* holdings, 8 million.

Obviously, the *Kolkhozy* constitute the most important source of agricultural production. On an estimated yield of 8·3 quintals per hectare, the *Kolkhoz* pays 1·7 quintals to the state in taxes; 3·3 to the governmental 'machine stations' which provide and maintain plant; the balance goes to the *kolkhozniki*. The *Kolkhozy*, with a sowing area of rather over 100 million hectares and a yield of 7 quintals per hectare, supply the state organizations with about 150 million quintals (approximately 15 million tons) surplus over the consumption of the rural population. This reckoning is, of course, purely theoretical, but, in 1934, when bread rations existed for the town population, the administration did distribute about 10 million tons of bread.

The importance of the *kolkhozniki* (who are allowed to cultivate from ½ hectare to 1 hectare each) lies in the production of vegetables and fruit and, to a certain extent, of livestock. The Plan for 1937 estimated that individual farmers and *kolkhozniki* possessed 29 million head of cattle as compared with 4½ million owned by the *Kolkhozy* over their vastly greater acreage. The private farmers and

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423 *kolkhozniki* were reckoned to be even richer in pigs, of which they
471 counted 15 million against 5 million on the *Kolkhozy* and an even
433 lesser number on the *Sovkhozy*. The tiny bits of land which belong to the *kolkhozniki* personally, as well as their domestic animals, have become a school of individual farming which has grown up in the middle of 'the Socialist experiment' as a compromise with the dictates of economics and human nature. In twenty-eight towns in 1938, 82 per cent rye flour, 74 per cent wheat flour, 86 per cent beef, 93 per cent milk, 97 per cent eggs, 87 per cent potatoes, and 72 per cent cabbages, were brought to market by *kolkhozniki* and individual farmers, and only the balance came from the state and collective farms. True the official statisticians could find comfort in the fact that as against the general balance of state commerce which amounted to 100 milliards of roubles the free market only absorbed 16 milliards: but the free market shows a definite tendency to grow and in four years has doubled its transactions.

656 The successful private initiative of the *kolkhozniki* has already
423 begun to weigh upon the minds of the protagonists of the integral Revolution. In the spring of 1938 a Government Decree proclaimed that 'abuses are observed on those allotments of land which are given over to *kolkhozniki* for the personal cultivation of kitchen-gardens or other domestic needs. These abuses consist in the fact that the allotments are sometimes not situated next to the habitations of the *kolkhozniki*, but lie in the middle of *Kolkhoz* lands and exceed the size allowed by the law. The worst part of it all is that these allotments have become the principal care of *kolkhozniki*, and that they show negligence in the accomplishment of their duties in collective farming. It has also been affirmed that these allotments are sometimes cultivated by people who are not members of *Kolkhozy*. A stop has to be put to this state of things as it leads to the development of bourgeois tendencies. The dangerous influence of *kulaki*, who have succeeded in escaping, is suspected.' As a result of this situation, Stalin, by a Decree of 15 August 1939, ordered a 'verification' of all allotments taken over by *kolkhozniki* for personal cultivation: he took the opportunity to recall the law which provided that such allotments were not to exceed ¼ or ½ a hectare. It was also declared that all allotments in isolated situations in the middle of *Kolkhoz* land were illegal and should be abolished: special attention was directed to *Kolkhozy* lying in the Ukraine and Western Russia. *Kolkhozniki*, whose individual allotments were to be abolished, were themselves to be expelled from their *Kolkhozy* and united in new *Kolkhozy* in regions where 'new land' could be found. For this purpose attention was directed to the lands beyond the Volga, in

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western Siberia, the Altai and the Far East. The execution of Stalin's 656
commands is to be completed by September 1940. It is not to be 423
anticipated that the acute conditions of 1929–34 will be repeated as a
result of this new drive against the human nature of the Russian
rural masses: the Communist machine has broken the strength of
peasant society. At the same time, there is little doubt that the harvest
of 1939–40 will not be as abundant as those of 1936–8.

The influence of the Revolution and of the Soviet régime on 311
forestry in the South of Russia has been no less baleful than on other 314
branches of rural industry. At the end of the nineteenth century
woods covered 20 per cent of the whole area of the Ukraine;
in 1928, according to the most optimistic estimates of Soviet
statisticians, they did not occupy more than 7 per cent. Even in
such a 'half-steppe' region as Poltava, owing to the care of the
Imperial Government and of large landowners, woods had covered
10 per cent of the total area. 'Destruction of forests is one of the
greatest evils because it is followed by the formation of deep ravines
which drain the district of underground waters. The consequence of
the formation of such ravines is that streams carry away valuable
soil to the rivers and the sea. Every year thousands of hectares of
good black earth are lost to the labourer and only serve to make the
Dniepr and its affluents more shallow. The destruction of forests,
the formation of ravines, the drying up of underground waters,
threaten the future of the Ukraine with the gravest consequences.'

The Soviet Government is well aware of the dark side of its 185
'achievement' in the agricultural life of the South of Russia. But,
as is well known, the Soviet leaders intend to effect a radical change
in the balance of productive forces within the Union. Their reasons
for this intention are both political and ideological: political because
they realize that their dictatorship rests upon the industrial proletariat
and has always aroused the antagonism of the peasants;
ideological because they are the apostles of the mechanistic conception
of life and, hypnotized by the material achievements of the capitalist
world, they ape it in their attempt to transform it and can seek
nothing more profound than the realization of Stalin's dream 'to
catch up and surpass America'.

In 1913 the relation of agricultural to industrial production in 433
Russia was 59·4 to 40·6. Under the original Five Year Plan formulated 185
in 1928 the Soviets aimed at the attainment of a balance which
should allocate 80·2 to industry and only 19·8 to agriculture. This
fantastic aim was based obviously on the possibilities of bringing
into exploitation the vast mineral resources which were known to
lie under the soil of the Soviet Union. And all the political ruthless-

433 ness and ideological fanaticism which are so characteristic of Com-
185 munist psychology—itself a manifestation of a certain state of spiritual sterility—were brought to bear to achieve ultimate objects, which on the American continent during the preceding century had been attained by more balanced, hardly less heroic, and certainly less catastrophic methods.

§ 3. INDUSTRIAL HISTORY OF THE UKRAINE

135 The industrial development of the Ukraine has been based on the
131 exploitation of the coal deposits of the Donets basin and of the iron-ore and manganese fields situated west of the Dniepr. Abundant layers of coal are found along both banks of the Donets. The eastern part of the carboniferous region lies within the territory of the Don with its Cossack population. The western part, which constitutes about two-thirds of the whole region, is situated within the boundaries of Soviet Ukraine.

Whether the Donets region properly belongs to the Ukraine is a question which has never been definitely settled. Historically, the lands along the right bank of the river Donets in its northern part belonged to that 'New Ukraine' which began to be populated in the second half of the seventeenth century by settlers from Muscovy and by fugitives from Hetman's Ukraine—at that time devastated by the Turkish invasions of Ahmed Köprülü and Kara Mustafa. Subsequently, these lands were incorporated in the Government of Kharkov. The lands along the southern course of the Donets formed part of the extreme eastern angle of New Russia where settled life only really began in the eighteenth century after the Tartar Nogay Horde, which roamed over this region, had retired beyond the Volga.

In 1917 the Provisional Government, in admitting five Ukrainian Governments as the legitimate area for the exercise of 'the national and cultural influence of the Kiev *Rada*', excluded the Government of Kharkov for the reason that the Donets coal area lay within it. The Ukrainian language is not commonly spoken in the coal-fields, and even if the large numbers of temporary labourers who come in from the north are ignored, not more than half the population of Donbass (the Donets coal area) can boast of their Ukrainian origin. In general, this region has nothing which unites its mixed industrial population to the essentially Ukrainian rural population of adjoining regions to the west. The only real link which connects the Donets coal-fields with the industrial districts along the Dniepr and the manganese and iron-ore regions is a purely economic one.

377 energy was not of urgent importance. Dnieprostroy supplies neighbouring towns and industrial plants with light and power (including the new 'Dniepr Electrical-Metallurgical Works' and the 'Dniepr Aluminium Works'), but the electrification of the railways of Soviet Ukraine has not yet been undertaken, nor does this appear necessary in view of the cheap supplies of fuel locally available.

397 As for machine and other mechanical works, there were in
392 existence before 1916: 'Hartmann's Locomotive Works' at Lugansk;
the more modern 'Kharkov Locomotive Works' and 'The Electro-
103 Mechanical Works', also at Kharkov; and a series of smaller machine works (particularly for the manufacture of agricultural machinery) at Sumy, Alexandrovsk, Berdyansk, Odessa and Kiev. The Soviet Government considerably enlarged the 'Lugansk Locomotive Works', and recently machine and locomotive works have been in process of construction and subsequent enlargement at Kramatorskaya (in the Donets region). New 'Tractors' Construction Works' have been built in Kharkov. Machinery plants have been founded in Berdyansk and Cherkassy; the old Kiev and Alexandrovsk works have been enlarged; and new agricultural machinery works have been built in Elizavetgrad, Melitopol and Kherson. The shipbuilding works in Nikolaev continue to supply the Black Sea fleet as before the Revolution. There, during the last war, ships were in construction for the Imperial Navy; armour-plate being manufactured in the 'Nikopol-Mariupol Works'.

381 Some progress has been made in the development of a chemical industry based on the abundant supplies of coal in Donbass. There are chemical processing plants at Slavyansk and Lisichansk, and near the railway stations of Gorlovka and Konstantinovka. The industry is still in the experimental stage, but Soviet 'Plans' envisage the supply of 30 per cent of the needs of the home market.

● 433 The Soviet emphasis on the development of Ukrainian heavy industry and a parallel neglect of the possible expansion of light industries has produced a badly balanced economy in Soviet Ukraine and the country remains dependent on other and often distant parts of the Union for the satisfaction of many of the needs of the people. Political considerations which aim at establishing the complete interdependence of the various parts of the Union are at the basis of the particular direction of the Five Year Plans in the Ukraine. The 'emigré Ukrainian economist, V. Sadovsky, writes: 'In 1934, 69·4 per cent of industry went to the production of materials and of the tools of production, and only 34·6 per cent for general needs. In this sense the relations existing in 1913 were

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different: 51 per cent and 49 per cent.' It is necessary to add that 433 ●
Sadovsky includes in production intended 'for general use' in both periods the output of agricultural industry: i.e. sugar, spirits, flour and sunflower oil. If these figures for rural industry are excluded, those for so-called 'light industry' remain practically negligible. For example, only 3 per cent of the textiles manufactured in U.S.S.R. are derived from the Ukraine; and there is no manufacture of cloth [288] or leather goods.

As Sadovsky justly remarks, the policy of exclusively encouraging 185
heavy industry has resulted in the neglect of the economic interests 433
of the western and central Ukraine. In effect, with the policy of industrializing eastern and south-eastern Ukraine, the Soviets have shown a tendency to de-industrialize the wide and rich western provinces. Here the basis of their policy is probably strategic as well as political. 'In a series of towns of right-bank Ukraine such as Zhitomir, Berdichev, Zhmerinka, Mohilev-Podolsk, Uman, Smela, signs of decadence can be observed during the period of the Five Year Plans.'

The 'Economic Plans' of the Soviet Government are subordinated to a general political policy which, as has been explained in the preceding chapter, aims at the complete fusion of the Soviet Ukraine with the rest of U.S.S.R.; and according to Communist theory political unity can only be based on economic fusion. In forcing the pace of the development of heavy industry in the south and south-east to the detriment of the light and agricultural industries of the rest of the country, the Moscow Government pursues two objectives. First, the importance of the Ukrainian national element in the Ukraine is reduced. 'The Ukrainian people are an old people of agricultural civilization and have never shown [369] any inclination for industrial work and life in big towns. The Ukrainian prefers the country if he can earn his living there, and if it is necessary he finds work in the different branches of rural industry' (Brégy and Obolensky). According to official Soviet statistics on [162] the nationality of workers in the Ukraine, the coal industry employs 75 per cent Russians and 25 per cent Ukrainians; the metallurgical, 73 per cent and 22 per cent respectively; the building trades 56 per cent and 37 per cent (*The National Policy of the Russian Communist Party Expressed in Figures*, p. 177). About 50 per cent only of the people in the Donets region are Ukrainians, and among the urban population of the whole of Soviet Ukraine 70 per cent are not Ukrainians. In two big towns like Odessa and Kharkov only 25 per cent of the inhabitants are Ukrainians. The same phenomenon can be observed in centres like Mariupol and Lugansk. In this wise the

4: Allen H-4 (no date) 1941 RDl Ukraine RDl

185 development of industrial centres in the Ukraine and New Russia
● 433 leads to a preponderance of 'new-comers'—in fact, of that social element on whose support the Soviets could rely in a political struggle with the forces of Ukrainian nationalism.

The second political objective which the Soviet Government has pursued is the strengthening of the economic dependence of the Ukraine on the rest of the Union. 'The Soviet Government systematically and intentionally binds Southern industry with strong bonds to the industries of other parts of the Union. This conclusion is imposed by a study of the categories of goods which are transported by the Soviet railways in a "meridial" direction. A considerable part of rail transport in Soviet Ukraine is engaged on the carriage of the half-finished products of industrial works by the most complicated and lengthy routes, e.g. from the banks of the Dniepr to the Urals or from the Moscow district to the Donets region and back. If a comparison is made of goods transported from south to north and from north to south, it will be seen that the machine works of the Ukraine do not "finish" their products, but that these are sent for the final processes to different and sometimes distant parts of the U.S.S.R. The motor industry, in particular, strongly binds the Central Russian region, South Russia, the Volga region and the Urals. Tractors and different agricultural machines can only be "finished" in Ukraine after being sent to receive certain parts from the north or north-east. The Soviet Government evidently is ready to make heavy sacrifices in finance and efficiency in order to attain its political ends which are to bind with strong economic ties all the different parts of the Union' (V. Levitsky).

433 Under such conditions, therefore, it is not possible to speak of 'Ukrainian economy' as an independent whole. Partly through natural causes and partly as a result of the political policy of the Soviet Government, the interdependence of the Ukraine and Great Russia has become even more definite than it was twenty years ago. The development of heavy industry, which has far exceeded the needs of the Ukrainian land itself, and the decline of agriculture has led to a strengthening of the 'meridial' tie (while at the same time Moscow, by somewhat similar measures, is strengthening the 'latitudinal' tie with the Urals, Siberia and Central Asia and is even extending it in this last direction into the outlying provinces of the former Chinese Empire).

The possibility of a wholly independent 'Greater Ukraine' (including present Soviet Ukraine with the additions of eastern Galicia (now incorporated in Soviet Ukraine), Bukovina and Carpathian Rus, may certainly be considered (as Ukrainians sometimes do) from the angle of the 'economic potentialities' of the country regarded as a unit separate from Great Russia. Neither over-populated Galicia nor the poverty-stricken Carpathian valleys could contribute to increase the sum of the wealth of a 'Greater Ukraine'. (The oil-fields of Kolomiya and Stanislavov, with their modest production of 500,000 tons a year, are not an important factor.) But the addition to the population of Soviet Ukraine (34 millions) of the 10 million poor peasants of the outlying provinces should not strain the resources of the Dniepr lands, and the new human material should, in fact, provide increased wealth.

The most remarkable feature of Ukrainian 'economic potentialities' is the fortunate balance between agricultural and industrial riches. Such a fortunate balance cannot be found in any country in Europe except France. The population of 'Greater Ukraine' rather exceeds that of France, as does the total area (588,000 sq. km. in Ukraine against 563,000 sq. km. in France). The average density of population (70.6 inhabitants per sq. km.) is also about the same as in France. 'Economic potentialities' are curiously comparable. The capacity of the Ukrainian harvest is about 200 million quintals (although this is not attained under the Soviet system of agriculture), double that of France which is not quite self-sufficient, but the French output of coal is about 55–60 million tons; the Ukrainian about 70 million. France produces 7–10 million tons of pig iron and from 8–10 million tons of steel. The corresponding figures for the Ukraine are 8 million tons of pig iron and 5 million tons of steel.

Ukrainian patriots who dream of a wholly independent 'Greater Ukraine' claim that the 'economic potentialities' of their country prove that this conception is not utopian. And in that sense, of course, they are right. 'Economic potentialities', in relation to the general complex of conditions which are required by the independent life of a country, are, however, to borrow an expression from mathematics, 'necessary' but not 'sufficient'. These 'economic potentialities' may promise a happy balance between agriculture and industry, but it is only in theory that the harmonious development of economic life remains possible, in practice it can encounter different obstacles in the political, social and cultural conditions which are determined by the course of history.

Ukrainian nationalists claim, for instance, that, should an independent 'Greater Ukraine' become established, life would arrange itself in the natural course of things and that light industries and crafts would arise to satisfy all the immediate needs of the population. Here, however, lies a far more difficult problem than would appear at first sight. Neither the Soviet nor the Imperial Governments can

4: Allen H-4 (no date) 1941 RDl Ukraine RDl

● 433 be held to have been primarily responsible for the backwardness of craftsmanship in the Ukraine nor of those 'light industries' which may be said to have taken the place of the crafts in the modern world. Crafts are created as a result of a long historical process which marches with the cultural development of a country. In the Ukraine a modern capitalist heavy industry was superimposed upon the structure of a rather backward rural economy in the latter half of the nineteenth century. By contrast France is the living embodiment of cultural processes which have produced a harmonious economic life where agriculture and both 'heavy' and 'light' industries are blended in such happy combination and where the work of craftsmen has reached perfection. But then France has a long independent historical past behind her, the political and social experiences of a nation of genius and great achievements in all the domains which challenge the human mind and human activities.

In this wise even 'the economic problem' of 'Greater Ukraine' is not limited by simple figures concerning her 'economic potentialities'. Therefore 'the political problem' which the present and future of the Ukraine represents becomes even more complex. With all the assets of her 'economic potentialities', with all the positive features which can be observed in her economic life even under present conditions, the Ukraine is still very far, as regards herself and other countries concerned, from a satisfactory solution of 'the political problem' of her form in the present and the future. The 'Ukrainian problem' is, perhaps, one of the chief reasons for the absence of balance in continental Europe.

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BIBLIOGRAPHICAL NOTES AND ADDITIONS TO CHAPTER VII

Sources for the Economic History of S.S.R. Ukraine

113 Any attempt to acquire an objective view of the course of economic life in the Soviet Union calls for an attentive, prudent and critical survey of the vast material published on the subject in Soviet periodicals during the past two decades. A work of this kind is beyond the resources of a single student and requires the corporate study of whole institutions, as for instance: the International Agricultural Institute in Rome; the East European Institute in Breslau (under the direction of Professor Auhagen); the Ukrainian Academy of Podebrady (Czechoslovakia); the Economic Cabinet of Professor Prokopovich in Prague; the Society for the Study of Modern Russia in Paris; the Bureau for Researches on Russia in Birmingham.

tons of grain or about 75% of the total amount that they secured 651
in the whole of the former Russian Empire. 661

This led to new clashes and with the suppression of the larger armed partisan bands, there grew up a new feeling of ugliness that boded ill for the security of the whole regime. The success of the Communists in the industrial centres was thus balanced by their failure to win over any substantial part of the rural population.

In the cities the new regime[1] met with problems of another 433
kind. The workers in the great coal and iron industry where Com- 369
munism was strongest had at a very early date expelled the managers [327]
and foremen and had taken over themselves the operation of the plants, many of which had been ruined in the civil war. Now they found that they were not able to restore production. Industry practically came to a halt and by the end of 1921 there was only one blast furnace operating in Ukraine. The production of pig-iron dropped to 11,300 tons, or barely 3% of the pre-war production. The railroads suffered the same fate. There was no way of repairing them and without a trained administrative staff, they almost stopped functioning. This, in turn, increased unemployment and a lack of food in the cities and once more the city dwellers began to stream out into the country districts.

As a final blow there came in 1920 one of those periods of 731
drought which have recurred sporadically in Ukraine throughout the centuries. In view of the general decay in transportation and the ravages of the war, this became serious and the situation grew even worse when the same phenomenon was repeated in 1921. Between the drought and the raiding detachments, the peasants had no reserves of grain and a famine broke out which cost the lives of several million Ukrainians.

This famine was very definitely the result of Communist mismanagement, plus the drought, but the Soviet regime was unable to take any effective counter-measures. When its extent was realized, the regime allowed through the League of Nations the organization of the American Relief Administration under Herbert Hoover. This collected and sent to the stricken areas large quantities of grain but it carried on its work with such impartiality that

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[1] [Ukrainian Soviet Republic established 1919 -- Analyst]

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CHAPTER TEN

The Famine

In 1921, the great famine which had swept over Ukraine 731
had been the result of a failure of the crops, a prolonged drought
and the excesses of Militant Communism which had demoralized
the country. The Soviets, more or less unwillingly, allowed the
despatch of foreign assistance and this saved the lives of millions.
There was to be no interference in the punishment of the obstinate
peasants this time.

In the fall of 1929, just as compulsory collectivization was being 241
introduced, the government in Moscow made an important change 645
in the agricultural set-up, for it transferred the Commissariat of 631
Agriculture to the central group by establishing an All-Union
Commissariat which was to be in control of all agriculture in the
Soviet Union. This meant that in Ukraine all of the work which
had been previously done by the local authorities was now trans-
ferred to Moscow. The republic commissariats ceased to have the
power to pursue individual plans for improving the conditions of
the soil, for varying the crops as their own advisers decided or as
the population felt it necessary. Everything was to be done from
the centre and the Ukrainian Soviet Government was compelled
to hand over all of its research stations and other institutions to
Muscovite control. This put a stop to the intensive development
of Ukrainian agriculture which had been fostered by the Ukrainian
land code and introduced the new system in which the peasants
were in the same position as the workers in the factories.

At the same time,[1] the central regime ceased to make public the 433
actual figures of production on the ground that they might betray
to outside nations important facts as to the Soviet development.
From this time on estimates and achievements were given only in

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[1] [1929-All-Union Commissariat of Agriculture was established 93--Analyst]

5: Manning S-4 (no date) 1953 RD1 Ukraine RD1

● 433 terms of percentages in reference to a prior date. Still the alreao, published data were so scanty and incomplete that it became increasingly more and more difficult to secure an actual picture of the progress in the Union as a whole and still more so in any of the separate Soviet Republics, for the central regime rarely broke down what little information it gave out among its constituent parts.

651 It was not long[1] before another change was made in the methods
241 of collecting the products from the collective farms. Under the new
661 system, the farms did not contribute according to their crop but according to the amount of land which they proposed to sow. This amount was due to the government, even in those cases where there was a complete failure of the harvest not under the control of the workers. In other words, if a crop failed because of bad weather conditions, the peasants were compelled to hand over just as much produce as if they had had a bumper crop.

It can be easily seen that such a measure was merely another device for weakening the economic position of the village and the independence of the collective farm. At the same time the establishment of official tractor stations in place of the old locally controlled centres which sent crews and machines into the countryside gave the government another weapon for the exertion of pressure upon the peasants and even the Communists who were in charge of the farms and these crews likewise were paid not on the basis of their work but of the theoretical area which was to be sown. Later this was again changed to the total area of the farm whether it was suitable for any special kind of agriculture or not.

These measures only increased the discontent among the peasants who once again began to limit their work to the minimum necessary to maintain themselves on a steadily dropping scale of living. To counter-balance this the Council of Commissars in Moscow passed a decree in February, 1930 allowing the local authorities who were, of course, handpicked by Moscow to resort to extreme measures against the kurkuls, to confiscate their property and then to dispose of them by sending them and their families to concentration camps, to special settlements in the far north or eastern Asia or merely by expelling them from their home district.

[1] [after establishing All-Union Commissariat of Agriculture, 1929 --Analyst]

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These measures were so vigorously applied that it has been estimated 651
that by the end of 1932, some 2,400,000 persons had been removed 241
from Ukraine to parts unknown.. These were naturally the more 661
prosperous, the more progressive and energetic persons who had profited by the New Economic Policy and had accumulated some capital.

The forcing of the peasants into the collective farms, and the 185
prohibition of almost all possibilities for the securing of raw ma- 433
terials had a further effect. Under the older system, the Ukrainian 511
peasants had time, during the winter especially, to work at home and to supply themselves most of their need for manufactured articles. They were able to work in leather and in cloth and wood. This was now rendered impossible, for the individual plots were too small to furnish the necessary raw materials and the peasants were forced, if they would satisfy their most immediate needs, to rely upon the goods turned out by the state factories. These goods were always inferior in quality and short in quantity, for the whole point of the Five Year Plan was to develop heavy industry as rapidly as possible and the government took no interest in seeing that the villages were supplied with consumers' goods. It concentrated its attention on those branches which could be of use in military preparations. Even when petitions were made by the Soviets in Odesa and Kharkiv for permission to establish textile factories, they were peremptorily told that the plan provided for the establishment of such plants only in selected parts of the RSFSR. Thus to the local shortage was added the costs of distant transportation, which made the price prohibitive even for the goods that were received.

In 1931 almost the entire grain reserves were removed from 651
Ukraine and the peasants had nothing to carry over, and when in 685
1932 there came a drought in the Ukrainian Soviet Republic, the 241
peasants had no supplies. 511

This did not bother the authorities. During 1931 and 1932 they collected from the peasants all that they could. The next step was to tighten the laws.

On August 6, 1932 the TsK VKP/b and the Soviet of Com-

[1929-1930 -1st Five Year Plan -- Analyst]

The crying need of the Ukrainians was for consumer goods. 433 Odesa and Kharkiv requested that they might be given the power 185 to build textile mills to supply the needs of the local population. 656 The request was denied, for the authorities had decided that the textile industry was to be concentrated in the RSFSR. The iron and steel cities requested that they might be given the permission to build factories to complete the fabrication of certain delicate types of machinery. The request was refused because it was to be only in the Moscow area that such articles were to be made. It was to be the task of Ukraine to furnish the raw material, the iron ore from Kryvy Rih, the coal of the Donbas, and to prepare the semi-finished pig-iron and other forms of semi-fabricated material that were needed by the central plants.

The plan not only provided for construction. It went even further and specified the exact amount of products that were to be turned out by each individual plant. While it was possible to secure some profits from the over-fulfillment of the plan, regardless of the effect that this might have upon the plan as a whole, any under-fulfillment was treated as a gross failure of obligation to the state.

This led, in turn, to additional restrictions on the freedom of [466] the workers. Punishments were ordered for tardiness, for absence from employment even for a single day without a satisfactory reason, for an attempt to change the place of employment. These regulations were not the product of the governing bodies of the republics but of the Union authorities themselves and they were transmitted from Moscow to the national republics through the liaison between the All-Union commissariats and their subordinate organs.

It was the same with agriculture. Moscow knew what each collective farm, each kolkhoz, each sovkhoz was to furnish, and woe to the group that failed. The famine had been the result and that had been used to break the spirit of resistance of the Ukrainian villagers. The government specified the acreage that was to be devoted to wheat, to barley, to all of the crops that could be raised and it did no good if the local agronomists pointed out new

1/1 [1930's - after famine -- Analyst]

433 methods, new possibilities. Their actions were interpreted as merely
185 a defiance of the central government, a new case of wrecking or
656 of sabotage and were treated accordingly. In the first rush of collectivization, the network of agricultural centres that had been developed in Ukraine during the twenties as a responsible answer to the local appreciation of the problem was wiped out and most of their leaders paid the penalty for their temerity in standing by their own studies and their own achievements.

[432] There were only the slightest concessions finally made to the peasants. They were allowed to sell a certain amount of the surplus grain to the government at a somewhat higher price. The individual families were allowed to possess about an acre of land on which they could raise their own produce, provide their winter food as a result of their own labors and they were allowed to sell their own produce in what may best be described as a legalized black market, but this meant merely the privilege to sell themselves in some of the larger local centres, and to many of these they were allowed to go only if they secured the appropriate permits from the heads of the collective farms and the local representatives of the NKVD.

[511] Even these slight concessions, while they could not bring prosperity to the peasants on the collective farms, rendered it possible for them to keep body and soul together despite the steadily dropping standard of living and the almost complete lack of consumer goods which were furnished in quantity only to the inhabitants of the more favored regions, as Moscow and Leningrad. At the same time, the peasants felt, ever more bitterly, the fact that the new conditions of living prevented almost all those home manufactures which in the earlier period had enabled them to compensate in some degree for the lack of proper articles of industry.

166 There was thus a growing material impoverishment of the
626 village communities and a loss of the old spontaneity and gaiety that had marked Ukraine even under the hardest conditions of the past.[1] Attempts were made to utilize this for forcing peasants to leave the villages and join the industrial masses in the cities and work in the new plants. Others were encouraged to leave the

[1] [after 1933 famine + Russification -- Analyst]

in the eastern Ukraine in the course of twenty years. At first their 728
actions were moderate but with the passage of time they began to develop and to reveal those tendencies which had marked their course in the east.

The first task was the reorganization of the country geographic- [648]
ally. On September 28[1] they had come to a new agreement with the Germans, whereby Germany had given up her claims to Lithuania in return for the area between the San and the Buh Rivers. So the Soviets assigned Wilno and its territory to an independent Lithuania; they annexed the region further south to the Byelorussian Soviet Socialist Republic and the rest to the Ukrainian Soviet Socialist Republic. This left to the Germans four sections of Western Ukraine, Kholmshchyna, Pidlyashshya, Posannya, and Lemkivshchyna, which were included in the Polish Government General and were governed directly by the Nazis, who allowed the appointment of a Ukrainian Central Committee to represent the Ukrainians before the higher authorities, especially in question of relief, etc.

The Soviet territory[2] was divided into six districts with their 728
centres at Lviv, Drohobych, Stanyslaviv, Ternopil, Rivne and 631
Lutsk. Each of these was then divided into rayons or regions with about 25,000 population. The centres of these regions were often small towns but the division was made quite arbitrarily and each centre was amply provided with bureaucratic machinery.

The economic condition of the country was extremely bad and [433] ●
the only saving feature was that the harvest had already been gathered, so that there was a good chance for a large part of the agricultural population, even of the poor, to survive during the winter. Yet the influx of refugees fleeing before the German advance filled the cities and the severance of connections with the west prevented the arrival of any more manufactured goods or supplies and, of course, none came from the east.

On the contrary, there came a new swarm of Soviet officials who 436
were themselves amazed at the wealth of goods in what, to the natives, seemed impoverished markets. They brought with them liberal sums of money to buy whatever they wished and they were

[1] [1939 -- Analyst]

[2] [of occupied Poland -- Analyct]

CHAPTER TWENTY-THREE

Ukraine After World War II

At the conclusion of World War II, Stalin and the officials 000
of the USSR were ready for the next step. They had satisfactorily fooled the Western powers, they had entered the UkSSR and the Byelorussian SSR in the United Nations and they had secured from the President of the United States and the Prime Minister of the British Commonwealth of Nations the right to return (by force, if necessary) persons with USSR citizenship. They had decorated the Allied leaders with medals commemorating the Russian conquerors of the past and they were ready to move ahead. They were sure that no one would care to ask about the fate of the unfortunate victims of the German slave camps because every American and Western civil or military authority of high rank had become convinced of the humaneness of Stalin and his group.

The Ukraine had been thoroughly devastated, as we have seen. 433 ●
Its factories and its fields had been laid waste. That part of its 642
machinery which had not been wantonly destroyed by one of the 727
two contesting invaders had been carted to work outside of the UkSSR. But even so, Ukraine was not quiet.

The population, even that part which had been more favorably disposed to the Soviets because of the persecution by the Nazis, had hoped that with the return of peace and the Soviet victory there might be an improvement in living conditions, an increase of consumer goods, a relaxation of some of the austerity that had marked the years before 1941. They were almost at once to be disillusioned, for they very soon found that out of the scanty stores of food which they had preserved from the greedy Nazis they were supposed to make generous gifts for the benefit of Stalin and the elder

433 brothers, the Great Russians, the one people that were loyal through
642 thick and thin to the authorities of the Soviet Union.

727 Yet instead of bringing in an era of peace and harmony, Stalin and his associates, emboldened by their successes in central Europe, immediately began a new campaign against the American "warmongers" and "imperialists" to prepare the people for still more rigid controls. It became clear almost at once that the return of the Soviet authorities was to usher in not a relaxation but a tightening of the old controls.

[668] These were bitterly resented. In Odesa and Kharkiv there were serious disturbances and while there may be some question as to whether these were directly inspired and organized by detachments of the U. P. A., it seems perfectly clear that they were suppressed not only by the forces of the MVD but by the Red Army.

631 On the other hand, as early as 1944 when the Nazi tide began
648 to ebb and the Western Sovietophile feeling was at its height, the Union Council of Commissars in Moscow passed a resolution authorizing the various Soviet Republics to enter into relations with foreign countries by having their own Commissariats for Foreign Affairs and their own national armies. Such devices completely fooled the Allied leaders. They did not notice or want to notice that the Ukrainian Commissar for Foreign Affairs, D. Z. Manuilsky, had long played a role as a Russian Soviet representa-
[701] tive in the Ukraine. Furthermore, the new Ukrainian and Byelorussian armies did not adopt the language of the country for which they were fighting. In theory after 1944 they were the only Soviet troops engaged against the Germans but even Stalin and the central authority did not pretend that there were no Great Russians in these armies. On the contrary, they boasted of this fact, whenever it was not necessary to hold before the world the shadow of Ukrainian and Byelorussian independence. The ruse worked and both Ukraine and Byelorussia were admitted to the United Nations, but both countries have declined to enter into diplomatic relations with any foreign country and have chosen, as was natural, to carry on all their negotiations through Moscow. Still later, in 1951, to carry this pretense of independence still further and deceive the

5: Manning S-4 (no date) 1953 RD1 Ukraine RD1

Ukraine After World War II

The Ukraine is regarded as a profitable colony from which the wealth is to be drawn in the manner of the old imperialism. It is to be absorbed and assimilated to the last degree and, at the same time, the RSFSR and the USSR, built around the elder brother, are working in desperation to prepare within its own boundaries new sources of supply. Within the last fifteen years, while the resources of the Donbas and Kryvy Rih have increased, according to the five year plans, some 10-15%, the actual percentage which the fundamental products of the Ukraine bear to the total production of those same products in the USSR has significantly dropped more than that. 000 433●

Thus at one and the same time the Kremlin is planning to annihilate all of the salient characteristics of the economy of the Ukraine and its population, on the ground that the Ukraine is a necessary source of raw material for the USSR and is striving to free itself of as much dependence on that raw material as it can. This is typical of the double-faced tactics of the leaders of the Union and it easily explains the still smouldering discontent among the Ukrainian people. 000

7:Bregy & Obolensky H-4, 5 (no date) 1940 RD1 Ukraine RD1

529 popular for sea bathing, although the beaches still lack a good tourist organization.

000 Nevertheless this branch of the activities of the country could, under more favourable circumstances, give a stable revenue to the population and thus contribute towards the enrichment of the Ukraine.

III

The Subsoil and Industry

135 Among the mineral riches of the Ukraine the first place belongs to coal and to iron ore.

These two important raw materials are to be found in Zone 2,[1] coal in the Donietz basin and iron ore on the left bank of the Ingouletz (a tributary of the Boug) at Krivoi-Rog.

Besides these two fundamentally important resources the Ukraine possesses important deposits of manganese and aluminium in the surroundings of Nikopol, graphite and soft coal mines, recently discovered in the centre of the country, salt in the Donietz basin, and finally peat and oil wells in Polish Galicia, in the surroundings of Stanislavov. Geological researches recently carried out have led to the discovery of oil on the shores of the Sea of Azov.

433 In order to give an idea of the potential reserves awaiting exploitation in the subsoil of the Ukraine, let us indicate that before the last war production represented 135 gold francs per annum per inhabitant.

316 As a result of its naturally very rich geological structure and of the organization of the extraction of its resources, the basin of the Donietz could be compared with the best coal-producing centres of Europe. Its reserves may be less important than those of Siberia (Kouznetsk),

[1] [see category 116, pp. 139-140 ---Analyst]

7:Bregy & Obolensky H-4, 5 (no date) 1940 RD1 Ukraine RD1

316 mines of the Krivoi-Rog and secondly the presence between these two centres, in the surroundings of Nikopol, of important deposits of manganese, whose annual extraction exceeds 1,000,000 tons.

Actually the proximity of the mines of Krivoi-Rog, the resources of which, according to the exact estimates of geologists, are considerable (1 milliard 100 million tons of mineral which contains 40 per cent of iron), has allowed the distribution of the whole iron industry of the Ukraine between these two regions—that of the
316 Donietz and that of Krivoi-Rog. This centralization
429 allows one to utilize on the spot the enormous quantities of coal and of employing the railways in the most economical way, thus reducing the transport charges which are a heavy item in relation to a material.

The whole traffic between these two regions goes in two directions. The coal of the Donietz is loaded on trucks which are directed towards the Krivoi-Rog. These trucks return with a load of minerals. Thus a continual exchange takes place between these two centres, resulting in a very small circulation of empty trucks and thus creating one of the essential conditions of a rational exploitation of the railways.

316 The centralization of the Ukrainian metal industry
433 strongly favours its development. The Ukraine to-day occupies one of the leading places in the production of pig-iron (the fourth place, with 6,500,000 tons annually), of steel (third place, with 5,000,000 tons annually), and of sheet-iron (fifth place, with 3,000,000 tons annually).

327 The shaping of the metal and its transformation into metallic manufactured objects is equally concentrated on the borders of these two producing regions. Thus only 18 per cent of the coal of the Donietz and 5 per cent of the raw mineral of the Krivoi-Rog are exported from the Ukraine. The rest is shaped and worked on the

The possibilities of the development of this industry 255 are enormous. The excellent quality of the vegetables and fruits and the big supplies of fish at the mouth of the Dnieper would have been able to give this industry a great importance, but in this respect the Soviet Government has shown especial incompetence.

Light industry in the exact sense of the word is 000 relatively little developed in the Ukraine. Apart from a few saw mills, soap factories, skin and leather works, furniture works, perfumeries, and porcelain factories, there is little which would attract our attention. We will limit ourselves to simply mentioning them. One cannot really speak of a textile industry. The whole Ukraine has only three factories and only produces 3 per cent of the textiles manufactured in Russia.

If agriculture is in a state of curtailment since the 433 appearance of the Soviet regime, if neither light industry 327 nor the means of communication have made any progress (which is equivalent to an absence of progress), the production of minerals and the metal industry show great development, especially since 1932, to which must be added the construction of the *Dnieprogues*.

This progress is not only manifested by the increase of production, but by the centralization of the metal industry in the districts in which the raw materials are extracted. Before the last war the Ukraine was a country of a great surplus of corn, iron, and coal. To-day the 433 surplus of her production is represented by manufactured metal goods and in this her economic potential is found to be radically changed.

The displacement and the development of the industrial potential of the Ukraine ought to have resulted in the increased welfare of her population. Nothing like that has been achieved.

Neither the aim nor the object of this book allow us

433 to enlarge upon the reasons which have determined the destruction of the favourable results which ought to have appeared in this direction. We shall only limit ourselves to enumerating the more important points.

1. The defective distribution due to frequent failures of transport which are expressed by the accumulation of unused manufactured goods in the great industrial centres and by the irregularity of furnishing the factories with raw materials.

2. The very inferior quality of the manufactured goods, the enormous percentage of rejects, the continuous shortage of spare parts required for the normal functioning, and the upkeep of the machines. These defects are due to an insufficient technical staff, to low wages and salaries, and to the police system introduced into the administration of the industries.

3. The lack of co-ordination between the different branches of industry, the poor condition of State commerce, due to the incompetence of the staffs and to the very complex and very slow bureaucratic procedure.

Nevertheless, imperfect though they may be, the new mines and factories exist and under other political and economic conditions, accompanied by the revival of agriculture, of foreign commerce, and of a better functioning of transport, the Ukraine would be put on the same economic level as the best organized and the richest countries of the world.

IV

Means of Communication

496 In no other sector of economic activity does the link
489 between the Ukraine and the rest of Russia become so clearly apparent as in the matter of the organization of

on this river was more than 80 per cent of the river 505 tonnage of the whole country. The ports of the Dnieper had, before the Great War, 360 steamers and more than 1800 other boats. Timber, salt, and corn composed, and still composed to-day, the predominant part of the goods carried by the Dnieper.

The insufficient and incompetent management of the river ports and the small tonnage of the ships still do not allow one to-day to increase the river transport of the Ukraine to any noticeable extent.

On the other hand the geographical possibilities of sea transport are enormous. Excellent ports like Odessa and Nikolaiev, lying 600 kilometres from Constantinople and 1000 kilometres from Batoum, can assure the transport of export and import goods on a big scale and especially that of petrol from the Caucasus. Beside [504] Odessa and Nikolaiev, the Ukraine still possesses other ports which are also favoured from a geographical and technical point of view, among them Marioupol, Berdiansk, and Kherson and some smaller ports of local interest.

We have noted that under normal conditions of 433 economic exploitation the Ukraine, thanks to its agricultural and industrial potential, could be put on the level of the richest countries of the world. The continuation of the economic development of the Ukraine is conditioned by the existence of a stable outlet. If it is a question of a surplus of wheat, sugar, and other produce of the land, or of the products of industry, this surplus is to-day dependent on the consuming regions of the rest of Russia. The Ukraine, which consumes 85 per cent of its resources of energy and almost all its minerals in order to transform them locally into manufactured articles, is not only a source of raw materials, as is usually imagined.

7:Bregy & Obolensky H-4. 5 (no date) 1940 RD1 Ukraine RD1

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German economists who foresee a perfect collaboration between the Ukraine and Germany (' Germany and the Ukraine supplement one another economically,' wrote the *Volk und Reich* in 1933) make a great mistake or even deceive the public intentionally in continuing to consider the Ukraine an agricultural land. If one compares the national agricultural revenue of the Ukraine with that of her industry, the first is certainly inferior to the second.

000
If one day the Ukraine should enter into the German economic system, and if Germany were to export the mineral which she lacks from the Ukraine, what would one do with the immense machine factories, and the coal mines which supply the metal industries, and with the quarter of a million workers of that industry? Let us admit that the Ukraine should become independent and that she should become detached from the Russian economic system, and that by this fact she should become hostile to Russia, who would cease to absorb the surplus of her economy, what would happen then?

Russia would, perhaps, create a new Ukraine in her Asiatic possessions. The wealth of the subsoil of Western Siberia is far greater by many times than that of the Ukraine. Metal is also more abundant. The soil of Siberia is more fertile and the possibilities of agricultural development are immense. That is not all. What would the Ukraine do with the surplus of her agricultural population, whose average density is greater than that of Germany, and which could emigrate, to-day, to Siberia and found colonies as it pleases? Is there another country in the world which will accept so great an emigration?

If the Russian Empire, backward though it is supposed to have been, has been able, during hundreds of years, to transform the wild Steppes into an industrial and

the industrialisation of Russia. The production of the heavy in- 185
dustries in Ukraine gave in 1931 63% of the whole output of coal, [433]
83% of the production of coke and 77% of iron ore of the USSR (*Izvestia:* Moscow, March 1, 1932). "The production of the Ukrainian plants solves the entire problem of metals in the whole Soviet Union" — the Kharkov *Communist* wrote on October 13, 1931. With these demands on the Ukrainian national economy Moscow placed the workers of Ukraine in the worst conditions. In the wage [465]
index the Ukrainian metal workers stood in 1931 in the 11th place, the miners in the 19th, the coke workers in the 27th place (*Izvestia:* Moscow, February 1, 1932). The conditions of work, dwelling, social insurance and cultural service of the workers in Ukraine were much worse than in Russia.

The forced collectivisation of the Ukrainian agriculture, started 474
in 1929/30, caused horrible devastation among the Ukrainian peas- 241
ants. Not less than 200,000 farms were destroyed, their property 661
was taken into the collective farms (*Communist,* Kharkov, Decem- 565
ber 21, 1934). The owners of these farms, the so-called 'kulaks', were deported together with their families into the North of Russia, where they mostly died of hunger and disease caused by forced labour. If one counts a normal Ukrainian peasant family at least 6 persons the number of those ruined and destroyed by this collectivisation reached 1,200,000 persons. In reality the number of the victims of Stalin's 'General Line' was much greater.

This 'liquidation of the kulaks as a class' has not only taken the lives of millions of Ukrainian farmers: it has destroyed the best elements among the peasants. These peasants were no 'exploiters': they were able farmers who tilled their land in the sweat of their brows and produced grain for their families and for the market. Due to this absurd and cruel 'liquidation of the kulaks' the shortages in the supply of agricultural products grew enormously.

Simultaneously with the 'General Line' the centralisation in
Ukraine to Moscow's advantage was tightened: in the administra- 871
tion, in both economy and cultural work. In November 1929, the [241]
Commissariat of Agriculture of Ukraine was abolished and Ukrainian agriculture was subordinated directly to Moscow. The autonomy of Ukraine in the field of education was considerably restricted; in 1931 the separate Commissariat of the Interior in Ukraine was abolished; in 1933 the Commissariat of Justice was subordinated to Moscow, etc.

According to the directives from Moscow the Ukrainian culture had to be 'national in form, Communist in content'. Therefore

467 missionaires, dock and wharf labourers, outdoor servants, &c. The members of *artels* in the second group always receive employment in preference to other workers, as their trustworthiness is guaranteed by the *artel*, and the fact of their membership is some guarantee that they are efficient.

The *artels* are democratic and useful institutions, and, in a country where promptness and trustworthiness are somewhat rare qualities, they play a most valuable part in giving a measure of confidence and security to both employers and workmen.

(2) AGRICULTURE

(*a*) *Products of Commercial Value*

243 The agricultural industry is the largest in the
Ukraine, and employs the great majority of the
[134] population. The black-soil region extends over most
of the area, only the Governments of Kiev, Podolia, and
Chernigov, and the borders of the Black Sea, lying
[433] outside it. It follows that the suitability of the Ukraine
[429] for cereals is equal to that of any part of the world,
and its surplus crops form a considerable proportion
of the world's food-supply.

243 The mean area under cultivation in the period 1901–5
433 was 52,000,000 acres, producing 20,700,000 tons annually.
Of this total, 45,600,000 acres were under breadstuff
crops, and produced 15,000,000 tons. For the year
1914, the figures were 56,300,000 acres, producing
23,000,000 tons. Of this 50,400,000 acres were under
breadstuff crops, with a return of 15,900,000 tons.

243 *Rye* is the principal crop, and is produced on the
429 peasants' lands more largely than any other cereal.
It is the staple breadstuff of the country, and the
internal consumption absorbs a large part of the crop,
a minor quantity only being exported. In some years
the crop is not sufficient for the home demand, and the
peasants have to use imported flour or substitutes.

Wheat is next in importance, and provides the largest surplus for export. It is mainly grown on

228 either by salting, smoking, or sun-curing. Fish-curing
[130] is carried on in factories at Odessa and Ochakov.

The fisheries in the Azov Sea are important, but the principal grounds are not in Ukrainian territory, those which lie within its limits being of insignificant value.

(4) MINERALS

(*a*) *Natural Resources*

135 The principal mineral resources of the Ukraine are coal, iron, and salt.

135 The *coal* is all in one large field usually known as
316 the Donets basin, which extends from west to east for a distance of 300 miles. It is considered the largest coalfield in Europe, but owing to peculiarities of the geological strata it is split up into several areas with varying qualities of coal. Roughly the flame coals are on the western end of the field, the coking and semi-anthracite coals in the centre, and the anthracite in the east, though coking coals are also found towards the north-east corner. Very little pure anthracite is mined on Ukraine territory, as the beds are mainly in the Don Cossack district. Throughout the field the seams vary much in thickness. Some are too thin to be worked. The average thickness of those worked is 21 to 35 in.; seams of 5 ft. are moderately common, and the maximum thickness is 7 ft.

316 The output of coal from the Donets field is variable.
● 433 This is chiefly due to labour difficulties, which arise in unexpected ways. Nevertheless if the figures of several years are considered together, a great increase is shown, and new pits are being opened every year. The average production for the years 1908 to 1912 was over 14,000,000 tons, the proportion of bituminous coal to anthracite being as 8 to 1. The figures include the whole field, as separate statistics for the portion over the Don Cossack border are not issued.

Iron.—The Ukraine is fortunate in having in close proximity to its coalfield a district rich in iron ore. The deposit, which is of excellent quality and easily worked,

is near the small town of Krivoy-Rog on the borders 316
of the Governments of Yekaterinoslav and Kherson, 433 ●
between the town of Yekaterinoslav and the port of
Nikolaev. This district has produced 95 per cent. of [43?]
the iron ore mined in European Russia in recent years, and after supplying the needs of the numerous ironworks on the Donets coalfield and dispatching great quantities to other parts of Russia, it exports a large surplus through the ports of Nikolaev and Mariupol. This supply is eagerly taken up, principally by Great Britain and Germany.

The Krivoy-Rog iron is a brown non-phosphoric ore, containing about 70 per cent. of pure iron. The output is steadily increasing: the ore mined amounted in 1906 to 3,000,000 tons, and in 1910 exceeded 4,000,000 tons. There have been further increases since.

Deposits of *manganese* ore are found in the Government of Yekaterinoslav at Nikopol on the lower Dnieper, a few miles east of the Krivoy-Rog iron district. Exploitation began in 1886, and has been very successful.

The production, of which 75 per cent. is exported, fluctuates greatly according to the price of manganese abroad, and a maximum output of 300,000 tons in 1907 was succeeded by a fall to one-half this amount in 1909, with a slight recovery in the following years.

Mercury has been exploited since 1879 at Nikitovka, in the Government of Yekaterinoslav. The mineral is found in the coal measures near the surface. After being successfully worked for thirty years, the mines were closed about 1909.

Salt.—The Ukraine has valuable deposits of salt. 317
There is an important mine of rock-salt near Bakhmut in 433
the Government of Yekaterinoslav. Boring has been continued to a depth of 760 ft. without passing through the entire thickness of the salt bed; of this 340 ft. consists of pure salt.

On the edge of the Kouyalnitski lagoon, north-east of Odessa, there is a salt lake which produces enough

9: Prothero G-4 (no date) 1920 RD1 Ukraine RD1

317 salt for the domestic needs and preserving industries
433 of the neighbourhood.

Brine springs are worked at Bakhmut and at Slavyansk in the Government of Kharkov. The brine is pumped to the surface and the salt evaporated.

The salt production is increasing but slowly, and not in proportion to the needs of the preserving and curing industries of Russia; prices are rising and imports increasing. The average output for the years 1905–9 was 1,326,000 tons of pure salt, which was over 50 per cent. of the production of all Russia.

316 *Building stone.*—Quarrying for limestone is a great industry near Odessa, which is built of the local stone. Granite is quarried on the banks of the larger rivers, and Yekaterinoslav and other towns are largely built of granite, which is also used for harbour works and railway bridges.

317 *Pottery clays.*—Kaolin is found in the Ukraine, the entire output of Russia being produced within its boundaries. Clays of good quality exist in the Governments of Poltava, Kharkov, and Kherson, and supply material for the local domestic industry in earthenware.

(b) *Methods of Extraction*

316 There is nothing new or striking in the methods used for extracting the minerals mentioned; on the contrary, except where foreign capital is interested, they are on the whole not equal to those followed in western Europe and America. The greatest drawback is the low producing power of labour, for which no immediate remedy is to be found. There is room for improved machinery on a large scale, but unless the habits of the people change, the output per head will remain comparatively small.

(5) MANUFACTURES

433 Manufacturing industry plays a relatively small
439 part in the economic life of the Ukraine, the country not producing sufficient for its own wants and import-

ing both from abroad and from other parts of Russia. 433
The two principal exceptions to this rule are manufactured 439
food-stuffs, and heavy iron and steel products.

Sixty-eight per cent. of the manufactured products 433
of the country consist of food-stuffs. The industries 258
contributing to this output are various, including flour- 259
milling, sugar-refining, and those dependent wholly or partly upon sugar, such as confectionery, fruit-preserving, distilling from molasses, brewing, and wine-making. Most of the undertakings concerned have only a small capital, and are situated near the source of their raw material. In the neighbourhood of Kiev, however, sugar-refining and its dependent industries are carried on in large works, many of which are capitalized from abroad.

The close conjunction of the Donets coalfield and 324
the iron and manganese deposits has enabled the 453
Ukraine to be almost entirely self-supporting in iron and steel manufactures of the first categories, and to supply the wants of the remainder of Russia as well. Pig-iron, bar-iron, roof-iron, steel rails, axles, tubes, and assorted merchant iron are all made in the ironworks which have been established in increasing numbers on the coal and iron fields. These works are seldom in large centres of population, but as a rule in small towns and villages, some of which owe their existence to the need of housing for the labour employed.

The output of raw iron and steel in the first stage of manufacture under the headings of Bessemer and Thomas bars, Martin-process bars, cast-iron and steel billets, and cast-iron tubes, was in 1906 1,300,000 tons, and in 1910 1,900,000 tons. The output of iron and steel in the second stage of manufacture, under the headings of T and H beams, rails, sheet-iron, rolled wire, roof-iron, trusses, springs, assorted merchant iron and axles, was in 1906 1,010,000 tons, and in 1910 1,602,258 tons. In the former year the output in both stages was equal to about 45 per cent., and in the latter year to about 55 per cent., of the total Russian output.

● 433 The development of the industry on a large scale
327 dates from the year 1870, when a British subject named Hughes received from the Russian Government a concession for the manufacture of iron rails. The company founded by him exists to-day under British management at a place called Hughesovka, and is known as the New Russia Co., Ltd. It has been followed up by a great number of other enterprises, some Russian, but most founded by British, French, and Belgian capital, which has been freely invested in the industry during the last forty years, particularly between 1880 and the end of the century.

392 Agricultural machinery is in constant demand.
433 When first used in the country, it had all to be imported, but of late it has been manufactured in the Ukraine in increasing quantities. Although the customs duties on agricultural machinery are low—certain types in fact are admitted free—the machinery made in the country finds more favour every year. For certain complex machines the Ukraine is still dependent upon imports, but, apart from these, it will probably be able in time to produce all the agricultural machinery it needs. In 1913, out of a total of 770 agricultural machinery factories in Russia, 271 were situated in the Ukraine. The value of their output was 31,000,000 rubles, that of the whole of Russia being 54,000,000 rubles. In addition to the production of the factories, large quantities of tools and machinery of the simpler sort are made by domestic workers, working single-handed or in small syndicates.

The principal agricultural machinery works are in the Governments of Kherson, Yekaterinoslav, Taurida, and Kharkov. The firms John Greaves & Co. and E. L. Mathias & Sons (Berdyansk), Hartmann Machinery Co. (Lugansk), H. A. Klassen (Sofiesk), R. & E. Elworthy (Yelisavetgrad), I. I. Hoehn (Odessa), and Franz & Schroeder (Neu-Halbstadt), are among those doing the largest business, and the names of the concerns show how largely foreign enterprise has entered this field, none having a Russian title. At Kiev and Kharkov

there are several large factories which specialize in every 392
kind of machine necessary for the sugar industry. 433

Several other industries, while of small account in comparison with those described above, deserve mention.

Manufacturing enterprises dependent upon animal 282
products divide themselves principally into tanneries 288
and woollen factories. The centres of the leather 433
industry lie in the northern portion of the country, especially in the Governments of Kharkov, Poltava, Chernigov, and Podolia. This industry accounts for 4·5 per cent. of the total manufacturing output of the Ukraine. The woollen industry is centred in Kharkov, which has two large cloth mills, and in the town of Klintsi in the Government of Chernigov, where not only cloth but knitted goods, yarns, rugs, shawls, and other woollen goods are turned out from eight considerable factories. The production of woollen goods represents 3·5 per cent. of the total Ukraine output of manufactures.

The timber-working industry is chiefly found in 313
the riparian towns, especially on the Dnieper. Yeka- 433
terinoslav takes first place, and Kremenchug, Alexandrovsk and Kherson also have saw-mills. Much of the timber shipped abroad is in an unworked state, and manufactures of the better sort are poorly represented. The industry accounts for only 4 per cent. of the value of the Ukraine manufactures.

The chemical industry is of minor importance. It 382
is concerned chiefly with the products and by-products 433
of coal gas at Odessa and Kharkov, but there is also a soda factory in the Bakhmut district and there are a number of match-factories in the Novozibkovsk district of Chernigov. The products of the industry represent only 3·5 per cent. of the value of the manufactures of the Ukraine. None of the more advanced branches of the industry is established in the country.

The industries enumerated account for 90–95 per 433
cent. of the manufactures of the country. The remainder, grouped under the headings of paper, linen, cotton, and fibre industries, are of negligible account.

9: Prothero G-4 (no date) 1920 RD1 Ukraine RD1

a very large population of Jews, who have become 438
general tradesmen and brokers to the community. 441

The cereal crop is the subject of elaborate commercial transactions, and much of it is sold two or three times before it is harvested. The lack of proper storage leads to the rapid dispersal of the bulk of the surplus crop. Odessa and Nikolaev have corn exchanges where the export of the crop is financed, and there is an exchange for internal cereal trade at Yelisavetgrad.

The sugar trade is subject to Government control. 438
A committee fixes annually the amount of sugar to be 439
placed on the home market and the distribution of 655
supplies to the refineries, the quantity so dealt with paying the minimum excise. After this allocation any surplus remaining is disposed of according to the general state of the market and the stock held over from the previous season, and is allotted for internal use or export. Russia was a signatory to the Sugar Convention of 1907, and agreed that, during the six years from the date of the convention, she should not export in all more than 1,000,000 tons. This specially affected the Ukraine as the principal sugar-producing area in Russia.

The sugar and alcohol markets are at Kiev, Kharkov, 438
and Odessa.

Wool of the finer sorts called 'Spanish' is dealt in principally at Kharkov, which is also the chief market for leather.

There is a flax market at Novozybkov in the province of Chernigov.

The principal timber markets are Yekaterinoslav and Kherson.

Odessa is a market for a great number of commodities produced in the interior, especially food-stuffs, cattle, tobacco, and vegetable oils.

The custom of transacting important business at 438
fixed fairs is of very long standing in the Ukraine, and, 475
while the importance of every fair tends to decrease at present owing to the adoption of other methods of trading, the fairs continue to be held, and, especially

(b) *Organizations to promote Trade and Commerce*

441 Organizations to promote trade in the Ukraine are not numerous. The true traders of the country are the native Jews, and to trace their involved dealings is impossible.

477 The sales of the coal and iron are almost wholly controlled by rings and cartels. The most powerful one, the *Prodamet*, or metal sales combine, controlled recently over 80 per cent. of all the iron and steel produced in South Russia and threatened to absorb the entire output.

441 185 The activities of the *zemstvos* in trade call for mention. These organs of local government actively enter into trade in agricultural machinery, improved seed, and pedigree live-stock, and endeavour to improve the facilities for selling the products of domestic industry. Their aim is to lift the internal commerce of the country from the condition of dependence on speculating middlemen, into which it has almost irretrievably fallen, but their achievements so far only touch the fringe of a deep-seated social trouble.

441 There are chambers of commerce at Odessa, Kiev, Kharkov, Berdyansk, and Mariupol, and there is a branch of the Russo-British Chamber of Commerce at Odessa. Odessa, Nikolaev, and Yelisavetgrad have corn exchanges, and coal and iron exchanges exist at Kharkov.

(c) *Foreign Interests and Methods of Economic Penetration*

471 432 The present state of commerce in the Ukraine provides a wide field for economic penetration from abroad. Agriculture in its first stages is not much affected, but in one case, that of the production of sugar from beet, the secondary stages of manufacture have been much exploited by foreign capital and management. The coal and iron mining industries and the iron and steel manufacturing industries owe their foundation in great measure to foreigners, by whom they are still largely

471 managed and financed. Russia has not been able to
453 find capital for new projects, with the result that within the last twenty-five years numerous undertakings have been started with foreign money. Official lists show that the nation most largely interested is France, Belgium and Great Britain coming next. The fortunes of these enterprises have varied, but in general their success has not been great in proportion to the original capital.

453 The last quarter of a century has also seen the
471 foundation of a number of trading banks with Russian titles and boards of directors at least nominally Russian. Their resources, however, are largely provided and completely controlled from Germany. These institutions have admittedly acquired a controlling interest in most of the concerns above mentioned, often at a very moderate outlay, and have supplied additional loan capital at profitable rates of interest. One and the same bank has in many cases obtained control over every stage in the production of a manufactured article, from the winning of the raw material onward, of course drawing its profit from every undertaking concerned. Certain British concerns have held out and kept their shares in their own hands, but financial institutions governed by German capitalists have a preponderating hold on those industries of the Ukraine which are large enough to repay their attention—that is, on the coal, iron, and allied industries of the Donets, and the sugar industries of the Kiev district.

The foreign interests in the Ukraine lie principally in the industrial concerns above mentioned. British interests are not strong, and are chiefly represented by some collieries and ironworks at Alexandrovsk and the general properties of the New Russia Co., Ltd., at Hughesovka and elsewhere (cf. p. 86).

327 Rog received an important complement. Supplied by the 436,000 kilowatts of the power plant, a new industrial combine was established in this region, with iron and steel works, with factories for aluminum, alloys, for cement, soda, ammonia, sulfurous acid and similar chemical products. In this district agricultural and heavy machinery is also built. The pig iron production of 47 Ukrainian blast furnaces amounted to 3.1 million tons in 1913, 4.3 million tons in 1932, and 6.7 million tons in 1934; steel production during the same years came to 2.7 million tons, 2.2 million tons and 5.4 million tons, and the production of malleable iron in each case came to 2.3 million, 2.2 million and 2.9 million tons. (104)

104. Kubiyovich: Geography of the Ukrainian and Bordering Areas, page 455.

402 The manufacture of heavy industrial raw products for machines and implements of all kinds occurs in the scattered industrial cities, especially in the part of the Ukraine on the right bank of the river. Khar'kov, with its construction of heavy machinery, agricultural machines, precision instruments and transport machines such as locomotives, railroad cars and tractors, stands at the head of Ukrainian industrial cities. In Kiyev ships, heavy machinery and chemical and electrotechnical machines are built, and in Odessa agricultural machinery, precision instruments and motor cars. Here canning and leather industry is also carried on. In Mariupil /164/ and Taganrog there are foundaries. In almost all larger harbors of the Black Sea coast, ships are built. In the Crimea there are canning and tobacco factories.

433 After Ukrainian industry suffered severe reverses as a result of the First World War and the Revolution, a wave of industrialism set in with the first Five Year Plan in 1928. The wealth of

433 the Soviet Union was to be increased according to the most modern methods. The industrialization of the agrarian country was based on existing industrial plants which were enlarged, on the opening-up of new sources of power and the establishment of large industrial combines. Foreign enterprises and above all foreign specialists assisted in a decisive way in the carrying-out of the first Five Year Plan. But the first and still fresh impulse of industrial development was broken even in 1932 at the beginning of the second Five Year Plan, the increased production figures for iron and coal to the contrary notwithstanding. Meanwhile, systems of stimulating production were introduced, such as the Udarniki Movement in 1933 (shocktroop workers) and the Stakhanov Movement of 1936, whereby production was actually increased. During the second Five Year Plan the number of industrial workers in Soviet Ukraine increased essentially more slowly than during the first. [44] In 1928 there were somewhat over 600,000 "independent workers" in the entire Soviet Ukraine, more than half of whom were coal and metal workers. In 1931 their number had increased to 900,000, in 1933 to over 1 million, and in 1935, to barely 1.2 million workers - female workers not included. (105)

105. Kubiyovich: Atlas of the Ukraine and the Area Bordering it, page 46.

By far the greater number of industries of the present Soviet Ukrainian economy still stem from the pre-war period, as for example almost all factories for agricultural machines. The only revolutionary step in this branch of economy is the merging of individual enterprises and the changing of names. The firm "Heim, Odessa" became the Bolshevik factory "October Revolution", "Fuchs, Kleiner, Berger and Zagorelin, Katerynoslav"

• 433 became /165/ "Red Progress, Dne[illegible]opetrovsk", and so on. The giant tractor factory in Khar'kov was newly erected, an accomplishment which is proudly shown to every foreign visitors. Important, however, is not only the number of tractors that leave the factory, but also their serviceability and durability. The significance of the industrial plants which have remained from the pre-war period is also evident from the invested capital, according to which, just as before, the iron industry ranks first, coal second and the sugar industry third. In these three industries half of the entire capital invested in Ukrainian industry is combined. Only after that come machine construction and the chemical works which to a certain extent have arisen only in most recent times. (106)

106. Kubiyovich: Commentary to the Atlas, page XXXIII.

257 The sugar industry forms only a part of the food and luxury industry which was a very important branch even before the war. Its center is in the beet-growing region between Podolia, Kiyev and Khar'kov. In 1913 200 Ukrainian sugar factories produced 1.2 million tons of sugar, in 1933 170 factories produced 0.8 million tons. (107)

107. Deminskiy, The Economy of the Ukraine, page 140.

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274 Besides that there is, also dating back to the pre-war period, a considerable mill and oil industry, the latter in the Kuban region, as well as distilleries.

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369 The increase of urban population is a natural concomitant of industrialization. The Ukraine has

435 where the state regulates everything, there is no longer any room for self-maintenance. State commerce is supervised by the various commissariats, which fact does not facilitate its smooth running. The commissariats for internal commerce, for the food industry, for local industry, the "Division for the Welfare of Workers" and other offices also have a voice. In 1935 there were 310,300 workers employed "in 000 the service of Ukrainian commerce". Of this crew the Jews represented 42.8% and the Ukrainians 38.1%. (118)

118: Soviet Trade, Kiyev 1937.

/171/ The Soviet press sometimes tells tales out of school about how Soviet business has developed under the leadership of the Jews who reputedly 433 have a talent for business. Pravda of November 16, 1936, writes of a "fantastic flood of rules and regulations". During the first nine months of 1936, they said, the people's commissar Weizer issued 42,000 orders, decrees and resolutions. Izvestiia of March 14, 1937 writes: "In Rostov on the Don the demand for light articles of clothing is great, but the shops are empty. Summer clothing, suits, underwear, sport clothes, bathing suits, there is nothing of this kind in the fifty-nine shops of the city. There is unbelievable disorder in supplies." On the subject [685] of profiteering Pravda reports on May 25, 1937: "In 1936 deficits, embezzlements and divestments amounted to an enormous sum: in government business 217 million rubles, in the consumer cooperatives 203 million rubles. But these represent only the deficits and embezzlements that were discovered!" Za Industriializatsii of July 17, 1937, gives an interesting glimpse into how the Donets region is supplied with food. "In the regulation of April 29 of this year," writes the periodical, "the council of the people's commis-

433 sariats of the Soviet Union decided that very shortly a reform in the methods of supplying food and articles of everyday use to miners of the Donets Basin is to take place. Since the time this decree was issued more than two months have elapsed, but nothing has changed. - We have visited the pits of all the different districts of the Donets Basin and have spoken to the men and women workers. We were obliged to conclude that in none of the districts has there been any improvement worth speaking of in the matter of food supply, that, on the contrary, conditions have grown worse to a large extent. We mention as an example the coal mines in the district of Rovenechky. Here there is a working population of 30,000 people; and every day one can see how /172/ long lines form outside the food stores already early in the morning. After these people have patiently waited, usually for several hours, they are told that no food supply whatsoever has arrived, so that they return home without having received anything. We asked a number of leading union officials how the food supply trade is organized. Trade union official Kondratov gave us the following explanation: In our store there is neither sugar nor salt nor groats. Meat is very seldom sold, and is usually of poor quality. Since February of this year we have had salt herring only one single time, other fish we have not even seen." (119)

119. Keyserlingk: *The Russian Worker Lives in This Way*, page 44ff.

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491 Like trade, the system of communication is poor in the Ukraine. In 1880, there were in the Northern Ukraine, 210,000 chumak, that is carters and dealers who took care of long-distance trans-

464 cuts wages." A few days later 'Za Industriyalizatsiiu' deals with the same subject: "The fluctuation of workers in the Molotov automobile factory is great, especially among those who have been newly employed. In the course of eleven months in 1936 over 12,000 workers have moved away. The shortage of housing is often given as the chief reason for the mass flight. Inasmuch as the machines are idle, the wages of the workers are greatly reduced... The workers wait for the machines eight to ten days a month. The management succeeds in providing normal or semi-normal working conditions for only a few of the workers - for the famous Stakhanov-workers." (125) Very similar are the conditions in the new combine "Zaporishshtali" where in 1935, 9151 workers were taken on and 7675 released; this is reported by Visti on May 22, 1939. The same paper reports on May 17, 1939 that 331 young farmers from the region of Chernigov were sent into the coal mines of the Donets Basin.

433 461 At the beginning of the second Five Year Plan, Bolshevik employers with the help of the erstwhile farmer Isotov refuted those false prophets who, like Marx and Lenin, maintained that people would lead a secure, carefree and enjoyable life in the socialist state with little work and high wages. After special preparations the miner Isotov turned out 40 to 60 percent more than he had previously averaged. Isotov's first effort was particularly celebrated and propagandized. It served as a pretext for the introduction of the Udarnik or shock-worker movement. Two years later, when this impulse had abated just as had the previous enthusiasm of the first Five Year Plan, the big, powerful peasant boy Alexei Stakhanov fell

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125. Quoted by Keyserlingk, The Russian worker lives in this way, page 22.

433 into the same trap. Instead of extracting 7 to
461 8 tons from a pit, Stakhanov now came up with 105 tons of coal. /176/ The familiar Isotov propagandistic fireworks were repeated, and as before many workers suddenly discovered how much more they could have been producing. They suddenly worked so fast that their hands grew hot. Instead of 590 crank shafts a forger could now mold 1027 in one shift, instead of 15 to 20 spindles women workers now managed 140, and instead of 320 pairs of shoes a shoemaker now made 3000 pairs. What good did it do that many refused to play the game any longer? Their achievements were measured according to the records set by the Stakhanov workers, and their wages decreased. In February 1936, the record-establishing frenzy reached its climax in the so-called Stakhanov Month when the world was to be shown what the Soviet Union was capable of achieving. Pravda gave an account of the results of this month of superior achievements on March 19th, 1936: "During the Stakhanov Month industry stood under the sign of bungling. Often the quality of the products decreased, defective products increased, and in many factories the state plan was not carried out..." The hatred of the workers toward the Stakhanov workers who were contemptuously regarded as ambitious yes men, went so far that they were sometimes even put out of the way. Nevertheless, the authorities continued to organize Stakhanov days, weeks and decades throughout the year, until the fever finally abated. Apparently the efforts had not resulted in favorable experiences. Mashinostroenie of December 23rd, 1937 gives a small picture of the expenses incurred during this time by a Soviet factory proprietor: "In the course of a week of the Stakhanov decade, 18,765 pistons had to be discarded as defective in the piston workshop alone of the factory 'Red Trade Union International'. The management of the factory has resigned

● 438 itself to such an extent to the mass production of
461 discards that it regards this condition as an unavoidable fact and builds up its production program on the score of 35 percent discards." (126)

126. Keyserlingk: The Russian Worker Lives in this way, page 32.

000 /Facing page 176/ /An important agricultural product: sunflowers. The seeds are removed from the receptacle with small sticks, and are then taken to the oil mills/*/Facing page 177/ /Picture of a village in the more well-timbered West Ukraine where the houses are built of wood/*/177/

445 In the spring of 1937, two years after the introduction of the Stakhanov System, the average gross wages of the Soviet worker, according to the official figures of the Moscow Statistical Office, amounted to 212 rubles monthly. (127) In the meantime there has hardly been any change in these figures. From these 212 rubles about 10 percent are deducted (128) so that the worker has 191 rubles left over per month to cover his living expenses. If he had no rent to pay, with this amount he could buy 106 kilograms of white bread or 44 kilograms of groats or 119 liters of milk or 29.5 kilograms of sweet cherries; or he could consume 24 canteen meals a month or buy 19 kilograms of margarine. He could also acquire three pairs of sneakers or a pair of cheap men's shoes, provided they are even available in a normal size, - usually there are only outsizes in stock in the state stores and cooperatives, for the Jews have shifted the marketable goods to the open market where their cost is multiple. There would not be enough for a man's suit of the cheapest

127. Keyserlingk: The Russian Worker Lives in this way, page 33.

*[For plates, cf. pp. 226-227, category 116-Analyst]

465 quality. For this the worker, if he does not spend any kopeks for food and housing, must work one and one-half months, and two months for the cheapest winter coat. Three colored shirts eat up a month's wages. For the same amount he could buy his wife three summer dresses of poor quality or three sets of underwear or three blouses. (129)

129. Statement of a German specialist in Kiyev.

Far too often the life of the Soviet Ukraine worker is exhausted in the struggle for his daily bread, for clothing and shelter, and yet before the war he was the best paid in Russia. Undoubtedly
345 the Bolsheviks have done a great deal of building,
466 but they neglected the building of houses in favor
185 of the building of clubhouses and palaces for cultural purposes, veritable giant structures of cement and steel where in the evening the locksmiths and metal founders then assemble "in order to hear lectures on Shakespeare". "For in human history there is an urge that has never before been recognized in the great masses...for art and literature. The famous tractor brigade of the Pasha Angelin comes forth with songs, and the workers of the Khar'kov tractor factory organize their own opera. Hundreds of groups of worker and kolhosp newspapers flaunt poems, stories and essays written by forge and tractor workers."

He whose thoughts take flight on the wings of Pegasus will find his hands only mechanically at
•433 work. Among the construction workers the "never-before recognized urge of the great masses...for art and literature" expresses itself in the following way, according to Pravda of July 16, 1937: "The brick production program for the year could only be 19 percent accomplished in the first five months of the year, and the two subsequent months have also brought no change. The construct-

433 tion of factories and dwellings is therefore held up and interrupted. Building costs rise a great deal... The shortage of bricks is increased by the fact that the bricks that are delivered are to a large extent useless. The imperfection comes to 25 to 30 percent by the time the bricks are laid. But even these bricks that are laid do not as a rule measure up to the prescribed
361 durability test." (130) In the finished settlements life is described thus in Visti, January 10th, 1939: "The settlement of Rudchenkovo in the Donbas has changed its aspect completely under the Soviet government. Large sections of many-storied houses have arisen and streets with lights and 10,000 square meters of asphalt sidewalks. Street car tracks were laid which connect the settlement with the center of the city of Stalin. There is also a bus connection here; the water system was improved, and the building of the cultural center for miners of the Donbas was erected aswell as a polyclinic, schools, clubs and shops. Nevertheless: 1. For three years now there have been talks in the district councils of the region and even in the regional executive committee about the opening of a sales center for heating material; 2. in /179/ Rudchenkovo a bath house does not yet exist; 3. the street car stop is out on the open steppe one-half mile from the clinic, and there is not even a small shelter at the car stopl 4. there is no public pharmacy; 5. lighting in the houses is unsatisfactory - the electrical plants have almost generally become useless; 6. there is no dairy; 7. there is no shop for children's goods; 8. the book business is very poorly organized. - The leaders of the trust 'Stalin Coal' and of the district council

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130. Quoted by Keyserlingk: The Russian Worker Lives in This Way, page 26.

361 of Kirovsk must finally take note of the needs of the workers and do away with the inadequacies which constitute the dark side of the tremendous economic development of the population of Rudchenkovo."

Soviet bureaucracy is working with unbelievable assiduousness on city planning. The building plan of Rostov, for example, according to Izvestiia of August 5th, 1937, had been under construction for eight years at that time, and the reconstruction plan of Nizhne-Tagilak, a small city in the Urals, is a book of 10,000 pages. The men who drew up the reconstruction plan of Gor'kiy must have been Stakhanov bureaucrats, for its pages are no longer numbered but - weighed; and it weighs two tons.

433 It sounds somewhat exaggerated when the Moscow Review of June 3, 1937, maintains that the Five Year Plans determine the course of future Soviet economy "with the accuracy of a time table". Not the only reason why these time tables cannot be adhered to is after all the fluctuation of the workers, which, in turn, is caused by the shortage of food and housing. Along with many other journals, 'Za Industriializatsiiu' of August 23rd, 1937, confirms the fact that the workers suffer considerable wage deficits because of the disorganization of Soviet economy: "The large companies of heavy industry are suffering from a great scarcity of oxygen. Thus, for example, the Martin furnaces of the plant 'Red October' in Stalingrad had to be allowed to go out because of lack of oxygen. /180/ A similar situation occurred in quite a number of other Soviet cities such as Khar'kov, Dnepropetrovsk and Rostov. In front of the oxygen factory of Khar'kov there are a great many trucks waiting every day, in order to get at least a few bottles of oxygen. This factory is extremely inefficient, which can in part be traced back to the frequent interruptions caused by accidents. Thus the Khar'kov plant was idle 28 percent

433 of the working time in July of this year...The Stalingrad plant presents a similar picture." (131) Where there is no needle there are no

131. Keyserlingk: The Russian Worker Lives in this way, page 25.

clothes. Pravda of May 8, 1939, criticizes the decrease in coal mining in the Donbas as follows: "The mine which determines the fate of the entire trust is behind schedule. It would seem as though the scandalous production which has lasted for a considerable time now would have been given serious consideration. The management of the mine is now trying to explain the poor production by the fact that the workers are leaving in order to attend to their spring planting." Visti of June 10, 1939, supplements this by reporting that the constant decrease of coal mining in the Donets Basin is forcing the economic management of Soviet Ukraine to increase the production of brown coal and turf.

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562 By reason of the Soviet Constitution, the
461 East Ukrainian woman has an equal position with
594 the man. This means that she has the same meager
rights and the same heavy duties. Since the wages
[465] of the man are not adequate to support the family, the woman must also earn some of the daily bread. Thus the woman is a worker. The elimination of Sundays and holidays, the long trips to work, the standing-in-line for hours to get food, the shifting of days off in the different plants, the incredible housing shortage, the rearing of children in institutions, the easy divorces of "couples living together" - all this disrupts the family.
594 The devastating consequences which are bound to
161 result from the disregard /181/ of the family,

I INTRODUCTION

101 The Ukrainian Soviet Socialist Republic (the Ukraine) is one of the U.S.S.R.'s sixteen constituent Union Republics. Situated in the south-western corner of the Soviet Union, the Ukraine is bordered on the south by the Black and Azov Seas and the Crimea (part of Russia); its western border touches the frontiers of Rumania, Hungary, Czechoslovakia, and Poland as well as the Moldavian Soviet Socialist Republic. Towards the north the Ukrainian S.S.R. verges on two other Soviet Republics: Byelorussia and Russia; and it is the Russian neighbourhood of the Don river which forms the Ukraine's eastern border.

101 In economic development and in population the Ukraine is second
135 greatest of the Soviet Republics. It has a fertile soil, a mild humid climate, and is rich in deposits of coal, oil, iron, manganese and salts, as well as in building materials. It has four main rivers: the Dnieper (third largest in Europe), the Dniester, the Bug, and the Donets (a tributary of the Don), which are navigable and are also useful reservoirs of power.

433 Before 1941 the Ukraine contained more than one-fifth of the in-
162 habitants of the entire Soviet Union. Its industry produced 54 per cent. of the coal, 60 per cent. of the pig iron, 48 per cent. of the steel, and 35 per cent. of the manganese ore turned out in the whole U.S.S.R.; it manufactured railway engines and cars, tractors, turbines, harvester combines, and mining and agricultural machinery for all parts of the Soviet Union. "It also produced artificial fertilizers, soda, glass and cement. The output of the sugar, meat-packing, flour-milling, distilling, and dairy industries reached great dimensions. Fishing was developed in the Black Sea and Azov Sea. The Dnieper Power Station,
361 the largest in Europe, was famous throughout the world. The cities of the Ukraine, both old and new, developed rapidly; during the past 25 years 77 new cities and 285 industrial settlements were built."[1]

241 Agriculture also was highly developed. In 1937-38 Ukrainian farms accounted for nearly one-fifth of the grain, one-sixth of the potatoes, and two-thirds of the sugar beet produced in the Soviet Union. The Ukraine also had a large proportion of the total Soviet Union livestock. Millions of head of cattle, pigs, sheep, and poultry were raised. Ukrainian agriculture was highly mechanized; before the war there were 90,000 tractors and 31,000 harvesting combines operating in the fields.

Area and Population

131 In January 1939 the Ukrainian Republic had an area of about 469,700 square kilometres including 8,000 square kilometres in its

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[1] The Sixteen Soviet Republics, Soviet News, London, 1945.

000 Soviet Union in 1939.

701 In the years before its reunion with the Ukrainian S.S.R. Western Ukraine was relatively undeveloped, as compared with the industrial and agricultural expansion which was taking place in the Ukraine itself. The backwardness of Western Ukraine before its incorporation into the Soviet Union is shown by the following table, which compares per person output in 1938 of the Ukrainian S.S.R. with that of Western Ukraine.

TABLE II

● 433 Per Person Output of Western Ukraine and of Ukrainian S.S.R., 1938

	Western Ukraine	Ukrainian S.S.R.
Electro power (kilowatt hours)	13.05	305
Cement (kilograms)	12.2	39.7
Bricks (pieces)	17.0	50.3
Sugar (kilograms)	5.9	58.9
Soap (kilograms)	0.5	2.58

Source : Planned Economy, State Planning Commission, Moscow, 1940.

Transfer to the U.S.S.R. of Bessarabia and Northern Bukovina

728 On June 26, 1940, the Soviet Government communicated with the Rumanian Minister in Moscow concerning Bessarabia[1]. In 1918, said the communication, Rumania, "taking advantage of the military weakness of Russia....(seized) a part of her territory, namely, Bessarabia, which is principally occupied by Ukrainians..." The Soviet Government, never having recognized any justice in Rumania's claims to Bessarabia, demanded the immediate return of this territory to the Soviet Union. The communication also stated that "... the return of Bessarabia is organically connected with the question of the return to the Soviet Union of that part of the Bukovina the majority of whose population is connected with the Soviet Union not only through the community of their historic destinies but through the similarity of their language and national Constitutions".

It was therefore proposed that Northern Bukovina, as well as Bessarabia, should be given to the Soviet Union, and that the transfer should take place immediately. On June 27, 1940, after the Rumanian Government's acceptance of the Soviet Proposals, Bessarabia and Northern Bukovina were re-joined to the Ukrainian Republic. The total area of these two ceded territories was 50,400 square kilometres, of which 21,300 were added to the Ukraine, and 29,100 square kilometres were incorporated into the newly created Moldavian S.S.R.

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[1] The Bulletin of International News, Royal Institute of International Affairs, London, July 13, 1940.

728 178 The progress in construction and rehabilitation which has taken place since the incorporation of this region into the Ukraine was revealed at a meeting of the Soviet of Nationalities on October 16, 1946, when the representative of the Transcarpathian Ukraine summed up the achievements in 1946. Nearly 300 enterprises had been restored, and nine machine and tractor stations had been set up to assist the peasants in working the fields. [212 871] Much had been done in 1946 to abolish illiteracy; there were opened over 100 schools, including 75 elementary, seven technical, 27 secondary, four music schools for children, and one school for surgeons' assistants and midwives.

433 At the end of December it was stated that 35 new factories had started functioning in the Transcarpathian Region in 1946[1]. Moreover, as compared with 1945 when there was not a single coal mine, 8 mines were working in 1946. There had also been definite progress in building up consumer goods industries. A clothing and a shoe factory had begun working in Vinogradov, and a knitted goods mill in Mukachevo. Some 200 light industries have been opened in various parts of the region.

Population of the Ukraine

162 The Ukraine is inhabited largely by Ukrainians, and also by Russians, Jews, and Poles. Most of the population is literate, and in 1939 there were many technical and vocational schools, as well as scientific research institutes and about 40,000 libraries.

At the census of January 17, 1939 the Ukrainian S.S.R. had 30,960,221 inhabitants; an increase of 6.6 per cent. as compared with December 1926. The greatest increase had occurred in the towns, largely as a result of the migration of country people to new industries. Thus from 1926 to 1939 the urban population more than doubled (5,373,553 to 11,195,620) while the number of rural inhabitants decreased by 16½ per cent. (23,669,381 to 19,764,601).

000 The same was true for the entire Soviet Union. From 147,027,915 in December 1926, its total population increased by 15.9 per cent. to 170,467,186 in January 1939, the urban population having grown from 26.3 million to 55.9 millions; and the rural population having fallen from 120.7 million to 114.5 million.

162 [361] The principal cities of the Ukraine with their population on January 17, 1939, are Kiev, the capital (population, 846,293), Kharkov, capital of the Ukraine before 1934 (833,432), the part of Odessa on the Black Sea (604,223), Dniepropetrovsk on the Dnieper River (500,662), Stalino, industrial centre of the Donets Basin (462,395), and Nikolayev (167,108).

In January 1939 the urban population of the Ukraine was 36.2 per

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[1] Soviet Monitor, London, December 29, 1946.

727 by the German invaders in the Ukraine, and more than two million had been abducted to slavery in Germany. Of these so deported, a considerable number perished in captivity[1].

The figure of four million Soviet citizens murdered in the Ukraine does not clearly indicate whether all of them were Ukrainians or whether a certain percentage came from other parts of the Soviet Union. No figures have been revealed showing the number of the Ukrainians killed at the front against the German armies and their 162 666 satellites. However, a comparison of the pre-war and present electorate figures for the Ukraine gives some indication of the decrease, at least of the adult population. On December 12, 1937, the Ukrainian electorate was about 17,540,000; in 1939 this number was increased by the addition of Western Ukraine, which on March 24, 1940, had more than five million voters. But nearly seven years later, in the elections of February 1947, despite the fact that part of Bessarabia, Northern Bukovina, and the Transcarpathian Ukraine also had been added, the total electorate in the Ukrainian S.S.R. was only 21,545,000.

Damages to Industry and Agriculture

727 433 The damage which the Germans inflicted on the industry and farming of the Ukrainian and Byelorussian Republics was tremendous, and far exceeded any comparable destruction in Western Europe.

[362] In the Ukraine the Germans destroyed or burned down 714 towns and more than 28,000 hamlets and villages, destroyed more than two million buildings and 540,000 outbuildings, and rendered about 10 million persons homeless (one-fourth of the Ukrainian population)[2].

Agriculture, animal husbandry, and industry were devastated. The coal mines were flooded. Over 16,150 industrial enterprises employing more than two million workers were stripped of machinery and the buildings heavily damaged or destroyed. The Germans wrecked or took away 127,800 electric motors and 81,600 metal-cutting lathes, destroyed railway lines and stations, and post and telegraph offices[2].

727 433 241 Tremendous damage was done to Ukrainian agriculture. The Germans ruined and plundered collective farms, state farms and machine and tractor stations.

Millions of hectares of planned fields were destroyed and over 56,000 tractors wrecked. Nearly 1,900,000 agricultural machines and 30,000 automobiles and other motor vehicles were destroyed or taken to Germany[3].

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1 Soviet News, London, June 29, 1946.

2 Soviet Monitor, London, February 8, 1947.

3 Letter to UNRRA from Ukrainian Government Department of UNRRA Supplies, April 6, 1946.

727 Industry is to be revived; railroads and other forms of transport
433 are to be rebuilt; the mining of coal is to regain and then to outstrip the pre-war output; the production of machinery and equipment for both light and heavy industry is to be restored; and to do this, iron and steel production is to be increased until it surpasses pre-war. War damaged power stations are to be rehabilitated, and additional ones are to be constructed, particularly in smaller communities.

[185] Altogether the output of industrial enterprises in the Ukrainian S.S.R. in 1950 is envisaged at 9,200 million roubles, of which the output of state industries under local jurisdiction and of industrial cooperatives is estimated to comprise 3,100 million roubles[1].

The volume of industrial production in the whole U.S.S.R. in 1950 - that is, the last year of the Five-Year Plan - is fixed at 205,000 million roubles (in 1926-27 prices). Compared with 138,500 million roubles in 1940, this represents an increase in industrial output of 48 per cent.

727 Particular stress in the Five-Year Plan is laid on the development
433 of the Western Ukraine and the Transcarpathian Region. Lvov, the main city of the Western Ukraine, is to be developed into a major industrial
361 centre, where there are to be built and put into operation an automobile assembly plant, electrical, telephone, and telegraph-equipment manufacturing plants, a glass works, a knitting mill, and food processing plants.

In the Transcarpathian Region, new light industry plants are to be constructed, and the mining of brown coal (lignite) is to be organized and extended. Provision is to be made for the rehabilitation and development of the woodworking and wood chemical industries and of farming, particularly fruit-growing, viticulture, livestock breeding and apiculture, [652] as well as of the food processing industries. The farms of the Transcarpathian Region are to be given considerable state assistance in the form of agricultural machines, fertilizers, and credits.

000 A more detailed discussion of the Five-Year Plan in connection with farming and the various industries follows in later sections of this report.

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[475] [1] It must be remembered that a number of enterprises although situated in the Ukrainian Republic are not under the Republic's jurisdiction, but under the jurisdiction of the Soviet Union Government.

II FARMING IN THE UKRAINE: PRE-WAR AND PRESENT

The Ukraine - famous for its mild climate and rich black soil - has always assumed a role of considerable importance in the agricultural production of the Soviet Union. For example in 1937-38 it produced one-fifth of the grain, two-thirds of the sugar-beet, and one-sixth of the potatoes harvested in the whole U.S.S.R. The chief grain crops of the Ukraine are wheat, rye, barley, oats, maize and millet. A considerable amount of sunflower seed is produced for processing into oil; small quantities of linseed and mustard seed are also produced for the same purpose. Other industrial crops, particularly flax, hemp, a little cotton and the rubber-bearing dandelion, "kok-sagyz" (discovered in 1931), were also cultivated extensively in the Ukraine before the war.

The following table shows the area and production of the principal Ukrainian crops in 1928, 1932 and 1937; figures for production in the entire Soviet Union are included for comparison.

TABLE IV

Ukraine: Pre-War Agricultural Production
(area in million hectares, production in million metric tons)

	Ukrainian S.S.R. Area	Ukrainian S.S.R. Production	Entire Soviet Union Production
Wheat			
1928	3.1	3.34	22.11
1932	5.743	5.6	20.31
1937	6.433	10.08	46.86
Other grain			
1928	16.6	10.55	50.73
1932	12.381	9.06	49.48
1937	11.761	12.69	73.43
Sugar beet			
1928	.647	8.42	10.13
1932	1.174	4.28	9.645
1937	.817	14.44	21.86
Cotton			
1928	nil	nil	.824
1932	.181	.03	1.28
1937	.224	.12	2.58
Potatoes			
1928	1.4	10.21	46.38
1932	1.071	7.72	43.07
1937	1.338	11.9	65.63

Source: Compiled from Socialist Construction, Moscow, 1936 and 1939; Sown Areas of the U.S.S.R., Moscow, 1939,; and Socialist Agriculture, Moscow, 1939.

TABLE VI

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Transcarpathian Ukraine: Area and Production of Crops in 1937

	Hectares	Average yield in metric tons per hectare	Total production in metric tons
Wheat	31,476	0.7	20,796
Rye	25,679	0.62	13,773
Barley	3,331	0.48	1,396
Oats	30,527	0.45	13,124
Potatoes	46,253	8.72	397,347
Sugar beet	96	23.86	2,291

Source: Statistical Handbook of Czechoslovak Republic, London.

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The Organization of Farming in the U.S.S.R.

It may be well at this point to outline briefly the methods of farm organization which characterize the Soviet Union.

The Collective Farms (kolkhozes)

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The foremost agricultural problems of the Soviet Union have been to increase the area under cultivation, to improve the methods of production, to raise yields per hectare as well as total production, and from this increased production, to ensure that adequate supplies of food reach the towns and factories. The primary means of achieving these aims was the organization of individual peasant farms into collectives (kolkhozes). By 1932, the end of the first Five Year Plan, this transformation was largely completed.

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During the second and third Five Year periods the policy of using the most modern methods of scientific farming in the kolkhozes was continued. Thousands of tractors, threshing machines, combines, mowing machines, binders, and other large machines were produced for use on the collective farms, and were concentrated by the government in Machine and Tractor Stations (M.T.S.), which served the kolkhozes for a legally fixed fee, paid in kind.

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The M.T.S. are now a well-known feature of Soviet farming. They have their own workshops and staffs of mechanics and farm-hands. The average equipment of an M.T.S.[1] before the war was 84 tractors (approximately 15 h.p.), 22 combine harvesters, 14 threshers, and a proportionate number of ploughs, harrows, drills, etc. Each M.T.S. works for a group of kolkhozes, usually about 30, and carries out all the mechanized agricultural work (ploughing, sowing, harvesting, threshing, etc.). Apart from these mechanical services, the M.T.S. gives qualified advice on rotation, technique, financial matters, etc.

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[1] What Are Collective Farms, V.A. Karpinski; Lindsay Drummond, London.

SU The State Farms (sovkhozes)

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242 After the revolution, when the large holdings were broken up, a certain number of well-organized estates were preserved as model agricultural stations. These were subsequently turned into State Farms (sovkhozes), the purposes of which was to experiment with seed selection, plant and livestock breeding, fertilizers, etc. The sovkhozes, operating with hired labour, turned over to the government all their production above the requirements of the sovkhos workers. SU

[407] To an even greater extent than the collective farms the State Farms were mechanized. They had the best technical equipment and, compared with the kolkhozes, twice the concentration of tractors per hectare. The sovkhos workers received wages at specially worked out rates: they had the use of living quarters, dining rooms, and educational and entertainment facilities. SU

[433] The State Farms achieved good results in raising production, both of grain and of industrial crops.

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311 However, the basic form of agricultural organisation in the U.S.S.R. continued to be the collective farms, which supplied the bulk of food and agricultural raw materials for industry.

372 At the beginning of the third Five Year Plan (1938), there were in the Soviet Union 242,000 collective farms (kolkhozes) embracing 91 per cent. of all the land under cultivation. The kolkhozes had 117.2 million hectares of arable land; the 3,960 State Farms (sovkhozes) had 12.4 million hectares;[1] and 1.3 million individual farmers had 900,000 hectares of arable land.[2]

Collective Farms in the Ukraine

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433 In 1938 the Ukraine contained almost one-ninth of the collective farms in the Soviet Union (27,393 out of 242,392). The total area occupied by the Ukrainian kolkhozes was 34.9 million hectares, of which about 61 per cent. was under cultivation. Like the kolkhozes in other Republics, the Ukrainian collectives made giant strides in the years between 1932-38: they increased in number, from 25,000 to 27,393; they increased their area of cultivation from 18.9 million to 21.4 million hectares;[3] but the greatest increase was in productivity, as the following table shows.

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[1] Although the area of the sovkhozes extended to 68 million hectares, the sown acreage amounted to only 12.4 million hectares.

[2] The Socialist Agricultural Economy of the U.S.S.R., Moscow, 1939

[3] In the Ukraine as a whole, however, the cultivated area declined from 26.4 million hectares in 1932 to 25.6 million in 1938.

TABLE VII

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Average Yields of Grain on Ukrainian Collective Farms
(metric tons per hectare)

	Ukraine Average pre-world war I 1901-13	Ukrainian Collectives Average		
		1932-34	1937-39	1939
Winter rye	0.98	0.83	1.20	1.15
Winter wheat	1.04	0.93	1.43	1.59
Summer wheat	0.70	0.73	0.76	1.03
Summer barley	0.93	0.93	1.26	1.52
Oats	1.07	0.87	1.12	1.23
Millet	0.99	0.61	1.0	1.16
Buckwheat	0.68	0.50	0.58	1.50
Maize	1.11	0.93	1.5	1.57
Average all grains	0.91	0.85	1.23	1.36

Source: Speech delivered by N. Kruschev[1], Secretary General of the Communist Party of the Ukraine, cited in Agriculture in 1940, A. Mortumov, Planned Economy, Moscow, 1940/II.

In the entire Soviet Union the average yield of grain crops increased from 0.7 tons per hectare in 1930 to 0.97 tons per hectare in 1938.

The development of agriculture in the collective farms of the Ukrainian S.S.R. from 1934-38 is further illustrated by the following table, which shows the area under cultivation, yield per hectare and gross output of the principal crops in 1938, all in percentages of 1934.

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[1] Now Premier of the Ukrainian S.S.R.

TABLE VIII

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Productivity of Ukrainian Collective Farms in 1938
(expressed in percentage of 1934)

	Area under cultivation	Yield per hectare	Gross output
Grain	88.0	176.0	157
Sugar beet	98.0	164.0	161
Sunflower	85.0	208.0	171
Flax	126.0	140.0	290
Cotton	146.0	671.0	986

Source: J. Stetsenko "Productivity of Work in Collective Farms in the Ukrainian S.S.R." Planned Economy, Moscow, 1940/I.

As the table shows, the area under cultivation of grain, sugar beet, and sunflowers decreased somewhat; however, average yields per hectare and total production were increased by 75 to 100 per cent. This increase in productivity was brought about by improved cultivation methods: the use of selected seeds, chemical fertilizers, more scientific crop rotation and above all, by the greater mechanization of labour. As we have seen, the Ukraine had in 1938 nearly a thousand Machine and Tractor Stations, as compared with 657 in 1932. The effect of mechanization in the collectives is best shown by the fact that whereas in 1932 the M.T.S. cultivated 77.1 per cent. of the arable area of the Ukrainian kolkhozes, by 1937 they were serving 98.8 per cent. of the collectives' entire arable land.

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Since 1938 (the last year in which comprehensive agricultural statistics for the U.S.S.R. were published) there has been little information available about agricultural production in the Soviet Union. The figures which have been made public emerge from press or conference reports, and the information is usually very scanty. The immediate pre-war picture is therefore not clear.

We do have, however, the planned 1941 area of cultivation in the U.S.S.R., as well as the percentage of increase over 1940. From these figures we can estimate the sown areas in 1940, as the following tables show.

TABLE IX

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U.S.S.R.: Planned Area of Principal Crops, 1941

	Planned area 1941 in million hectares	Per cent. increase on 1940
Grain	111.1	0.2
Industrial crops	12.0	1.7
Vegetables, melons, potatoes	11.4	12.9
Fodder crops	22.5	24.3
Total	157.0	3.9

Source: Report of N. Voznesensky, Chairman of the State Planning Commission of the U.S.S.R. delivered on February 18, 1941, at the Eighteenth All-Union Conference of the Communist Party of the Soviet Union.

Using these figures as a basis, we have the following areas for 1940.

TABLE X

U.S.S.R.: Area Sown in 1940
(in million hectares)

Grain	110.9
Industrial crops	11.79
Vegetables, melons, potatoes	10.1
Fodder crops	18.1
Total	150.89

Source: Calculated on the basis of Table IX.

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Although we do not have similar figures for the Ukrainian S.S.R. alone, we do know that in 1940, 612,000 hectares were sown to sunflower, and 764,000 to sugar beet. The harvest of sugar beet amounted to 14.8 million tons (an average of 19.4 tons per hectare). In the same year the harvest of grain was over 28 million tons, and of potatoes, 21.5 million tons.[1]

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[1] Pravda Ukrainy, Kiev, August 28, 1946.

241 In comparing these figures with 1937 production the increases in the area
433 of the Republic must be borne in mind.

Effects of the War on Ukrainian Farming

727 When the German armies were finally driven out of the Ukraine in
241 1944 they left most of the Republic's farmsteads completely in ruins.
474 So great was the devastation which they wrecked that even today the full extent of it is not definitely known. It has been estimated by Ukrainian officials, however, that the invaders ruined and plundered 27,110[1] of the Ukraine's collective farms and 872[1] of the state farms, burning the buildings and wrecking or stealing the machinery. The Germans also wrecked over 422,000 collective farm buildings and 425,000 privately owned farm buildings[2], scorched and laid waste millions of hectares of farm land, and destroyed 1,300[1] machine and tractor stations. The consequent losses of machinery were enormous. Fifty-six thousand tractors, 24,000 harvester combines, 30,200 trucks and automobiles used in farming and 1,892,000 other agricultural machines were destroyed or stolen by the Germans. The ~~next~~ table shows the losses compared with pre-war numbers.

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[1] Statement by Mr. I.S. Senin, Deputy Chairman of the Council of Ministers of the Ukrainian S.S.R. at a meeting of the Deputy Foreign Ministers on February 7, 1947, published in Soviet News, London, February 8, 1947.

[2] Department of UNRRA Supplies of the Ukrainian Government, Kiev, April 6, 1946.

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Nevertheless, the 1945 harvest - assisted by lend-lease supplies which were still then available, and (beginning in December 1945) by UNRRA relief deliveries - was furnishing the population a fair amount of cereals and bread. There was, however, very little meat from domestic sources, and only a small amount of fats and oils, as the following table shows.

TABLE XII

Ukraine: Production and Utilization of Fats and Oils, 1945.
(thousand metric tons)

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	Oilseeds	
Production		
Total production of oilseeds		496.4
Deduction for seed		53.6
Available for processing		442.8
Utilization		
[388] Total production of oil		105.8
Deduction for industrial use (soap manufacture, etc.)		26.7
Available for human consumption		
by urban population	29.0	
by rural population	50.0	
Total		79.1
Average consumption		Kilograms per person per year
urban population		2.41
rural population		1.86
Average		1.98

TABLE XII (Continued)

Animal fat

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Production		74.7
Imports		12.5[1]
Available for consumption		
by urban population	32.7	
by rural population	54.5	
Total		87.2
Average consumption		Kilograms per person per year
by urban population		2.73
by rural population		2.0
Average		2.19

Summary (Oils and Fats)

All fat and oil resources			
Vegetable oils		105.8	
Animal fats		74.7	
Total production		180.5	
Imports		12.5[1]	
Available for distribution		193.0	
Consumption			
Technical purposes		26.7	
Food			
Urban	61.7		
Rural	104.6		
Total food		166.3	
Total consumption		193.0	
Average consumption			Kilograms per person per year
by urban population			5.14
by rural population			3.86
Average			4.17

[1] Available from Lend-lease

Source: Ukrainian Department of UNRRA Supplies, Kiev, May 15, 1946.

433 As the table shows, the Ukrainian people received in 1945 only 4
262 to 5 kilograms of fats - 8 to 18 kilograms less than their pre-war
388 annual consumption rate.

Disaster in 1946

433 Early in 1946 other UNRRA supplies in addition to food began to
241 arrive - seeds, small quantities of fertilizers, and a few farm tools.
648 Throughout the Ukraine great efforts were being made for a successful
spring sowing. However, there were still shortages of seeds, fertilizers, implements, and machinery. None of the 1,600 tractors promised by UNRRA had arrived. Much of the work was still being done by hand, especially where no draught animals were available.

[311] Even despite these drawbacks, it is estimated that about 80 per cent. of the pre-war area was sown; but no figures are available on the acreage planted to individual crops. In April 1946 the UNRRA Mission, describing the difficulties in getting detailed agricultural statistics, stated:

> "....During a recent inspection trip we were informed by the agricultural authorities of the Poltava oblast,[1] one of the best agricultural regions in the Ukraine, that they did not even try to set production goals for their collective farms this year (1946); they simply told each farm to plant as much as possible of whatever crops it could raise with the seed, equipment, draught animals, and manpower available. (For example) We believe that nobody really knows with any degree of accuracy what acreage was planted to oil seeds in the Ukraine this year, what yield may be expected, or how much of the resulting oil will be available for non-farm use."

433 The Ukrainian people set high hopes on the 1946 harvest. However,
241 in the very summer when a good crop would have made all the difference,
649 the greatest drought since 1891 destroyed their prospects. It affected a vast area from Moldavia to the Urals, south to the Kuban and north to Moscow. The earth was parched; and the crops, burnt by the hot summer sun, had little to draw upon because rain and snowfall in the winter of 1945-46 had been poor. Hopes withered with the wheat. The potato crop too was affected: a hot wind out of Asia dried the plants, and dwarfed the tubers.

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[1] Oblast: a district similar, for administrative purposes, to a county.

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433 During all this time the livestock of the Ukraine (see next
231 Section), was being slowly and laboriously built up by gifts from the
262 rest of the Union, by levies on Germany, and by natural increase.
731 Meat was very scarce, since no-one was willing to slaughter and further deplete the slender herds. Cows, used for draught purposes, gave little milk. Now added to these intense shortages of meat, fat and dairy products was another great deficiency of cereals and bread, hitherto the mainstay of the Ukrainian post-war diet.

U
241 The 1946 harvest cannot, at the most optimistic estimate, be
433 reckoned at more than 40 per cent. of 1940 in cereals and vegetables per hectare sown.[1] There is no fodder for the jealously guarded
231 animals; shelter for them is also very scarce since the people themselves are only now moving out of dugouts. If the animals are slaughtered, the small supplies of dairy products and meat will soon disappear; and the problem of draught power will remain as acute as ever.

U
241 There is an agricultural dilemma in the Ukraine which a good
433 harvest would have gone far to break. Although extensive and con-
464 tinued demobilizations have been taking place, there is a great shortage of labour on the farms.[2] If manpower is taken from the farms to help produce the machinery necessary to liberate further men from the land, there may not be enough farm workers left to produce sufficient food for the factory workers. The poor harvest has aggravated this vicious circle.

The Soviet Government has attempted in various ways to meet this problem not only in the Ukraine, but throughout the Union. Everyone who is able to work does so; young people, old people, women. The
U
[462] women who worked during the war have remained part of the labour force in both industry and agriculture, and an increasing number are being recruited. In the Ukraine in 1946, women composed at least 60 - 70 per cent. of the farm working force.

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241] At the same time as steps are being taken to concentrate more workers in agriculture, the organization of the collective farms is
474 being overhauled and geared to higher efficiency. To accomplish this,
447 the Soviet Council of Ministers created on September 19, 1946, a Collective Farm Council, whose main tasks will be to elaborate measures for the improvement of collective farming. This Council which is authorized to call conferences of collective farm representatives when necessary, was set up for the purpose of "establishing strict control over the observation of collective farm statutes and for the solution
9c of questions of the collective farm structure." One of their primary

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[1] One must also bear in mind the reduced area under cultivation.

[2] The war losses are felt very acutely.

The Five-Year Plan in Ukrainian Agriculture

185 According to the Five-Year Plan 1946-50 the crop area of the
311 Ukrainian S.S.R. in 1950 is to reach 30.5 million hectares, of which
21.3 million are to be planted on the collective farms. The dis-
474 tribution of major crops is planned as follows.

TABLE XIII

Ukraine: Crop Area in 1950 (Planned)
(hectares)

	Total area	Including on the collective farms
Grain crops	19,600,000	14,100,000
Industrial crops	2,600,000	2,200,000
Melons, potatoes, and other vegetables	2,800,000	1,000,000
Fodder crops	5,400,000	4,000,000

Source: The Five-Year Plan, 1946-50

The area sown to sugar beet in 1950 is fixed at 830,000 hectares, and to sunflower, 801,000 hectares. The hopfields are to be rehabilitated, and the area of vineyards growing European varieties of grapes is to be expanded. Measures are to be taken to drain 40,000 hectares and irrigate 30,000 hectares of farm land; and all engineering work needed to ensure normal production is to be restored.

241 Average yields of Ukrainian crops in 1950 are envisaged as follows:
433 grain, 1.42 tons per hectare (compare 1939 average 1.36); flax, 0.42
185 tons; sugar beet, 19 tons; and potatoes, 11.2 tons per hectare.[1]

In the entire Soviet Union in 1950 the grain harvest is planned at 127 million tons, of which the Ukraine is to produce 27.8 million tons, or more than one-fifth. The Ukraine's sugar beet harvest is fixed at 15.7 million tons, representing over 60 per cent. of the sugar beet harvest of the U.S.S.R. in 1950. The production of potatoes is expected to be 23 million tons.

The following table compares these targets with pre-war production.

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[1] Pravda Ukrainy, Kiev, August 28, 1946.

TABLE XIV

185 433 241 Ukraine: Planned Production in 1950 Compared with 1940 and 1913 (see Note)

(million metric tons)

	1913	1940	1950
Grain	20	28	27.8
Sugar beet	8.9	14.8	15.7
Potatoes	about 5[1]	21.5	23

[1] According to the report in Pravda, the potato harvest in 1940 was "over 4 times" that of 1913.

Source: Pravda Ukrainy, Kiev, August 28, 1946.

[728] Note: In comparing the 1950 target figures with pre-war production it is important to bear in mind the territorial revisions which occurred in the Ukraine after 1939, when she regained Western Ukraine and part of Bessarabia, lost a part of the Moldavian Autonomous Republic (which, together with the Moldavian Section of Bessarabia, then became a separate Union Republic), and added Northern Bukovina and Transcarpathian Ukraine.

[131] 311 721 Thus the present area of the Ukraine exceeds its 1938 area by approximately 118,000 kilometres (11,800,000 hectares). However, we do not know precisely how much of this is agricultural land. The arable land in Western Ukraine before the war amounted to 4 million hectares; that of Transcarpathian Ukraine, to 239,000 hectares. In the parts of Bessarabia and Bukovina which were ceded to the Soviet Union, 3,285,800 hectares were classified as arable. If we roughly divide this between Moldavia and the Ukraine in proportion to the total ex-Rumanian area incorporated in each, about 1,300,000 hectares of agricultural land would have been added to the Ukraine in its share of Bessarabia; and the arable area of present-day Ukraine would exceed the 1937 cultivated area by about 5½ million hectares, the potential total being 30.6 million. The fact that the Five-Year Plan fixes the Ukraine's 1950 area of cultivation at 30.5 million hectares seems to support this assumption.

Livestock

231 In 1941 the number of livestock in the Ukraine was estimated at 30.4 million, including 10.5 million cattle and 4.6 million horses.[1]

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[1] Statement on March 20, 1946, by Mr. Baranovsky, Ukrainian delegate to the UNRRA Fourth Council Session, published in the "UNRRA Journal", March 21, 1946.

III INDUSTRY AND TRANSPORT

135 311 433 Ukrainian industry is based chiefly on rich deposits of coal in the Donets Basin, iron ore in the Krivoi Rog district (where the ore contains 60 per cent. metal), and manganese ore in the Nikopol area. To utilize this great natural wealth a very large metallurgical and machine-building industry has been bult up in the Ukraine. At the same time, many food factories including sugar refineries, have been created to process the food so abundantly produced by Ukrainian farms. In the period between wars, the share of the Ukraine in the country's industrial output declined somewhat, not because of slackened activity - on the contrary, Ukrainian industry continued to be even more intensively developed - but because the policy of the U.S.S.R. was to decentralize, and to expand and develop those areas, particularly the eastern ones which previously had no industry. This lengthening of the industrial pace naturally brought about a certain change in emphasis, so that whereas by 1938 the productivity of Soviet industry as a whole had increased to about eight times the output of Tsarist Russia in 1913; the proportion of Ukrainian output in the total was lessened. For example, in 1928 the Krivoi Rog district of the Ukraine produced 78 per cent. of all the iron ore in the U.S.S.R.; but in 1937, although this district was producing more, its share in the total was only 47 per cent.

War Damage to Industry

727 433 Before they were finally driven from the Ukraine the Germans furiously set about wrecking those Ukrainian industries which still survived. They stripped the plants of equipment and destroyed the buildings; they flooded the coal mines; they completed the destruction of the famous Lenin Hydro-Electric Power Station and the Dnieper Dam - both of which had been partially disabled by the retreating Soviet Army troops on August 28, 1941.

The damage to all branches of industry was tremendous and will take many years to repair, particularly since the shortages of labour and equipment, as well as the scarcity of food have been a hindrance at every step. Some of the difficulties were destribed in a report of the UNRRA Mission after visits to several of the larger Ukrainian cities in May 1946.

"In our cable...we outlined the condition and needs of industrial plants in six principal Ukrainian cities visited by members of the Mission during May. The pattern is fairly uniform. Many plants were completely destroyed and those which still stood were usually heavily damaged and almost universally gutted of all modern equipment. Included among those industries hardest hit are the heavy capital goods industries, machine tool manufacturing industries, and power stations, as well as the rolling and stationary stock of all forms of transportation, and equipment for processing building materials. So great is

727 the destruction that there are competing calls upon the limited
433 supplies of manpower, equipment and materials. We observed many instances of ingenious adaptation and salvaging of old and antiquated machinery; yet restoration was everywhere slow and complicated by lack of equipment to move away the rubble, transport the materials, produce the electric energy, and repair the streets, sewers, and gas and electric lines. There is a vicious circle. Iron and steel, for example, are needed to repair electric power stations and rebuild houses; efforts to restore these basic industries and facilities are constantly delayed because there is not enough shelter; and neither shelter nor the industries and community facilities can be replaced until there are more cranes, tractors and trucks. Low-calorie diets, induced by lack of foodstuffs, cause low efficiency and slow production. The food UNRRA is shipping has sustained the people, though, to be sure, it has not been sufficient to compensate for local shortages; the country may somewhat accelerate its industrial rehabilitation - especially of shelter and water supplies - when the equipment items on the UNRRA programme arrive. Meanwhile it is slowly restoring those parts of its economy which will respond to manpower aided by a minimum amount of mechanical equipment."

Industrial Aims of the Five-Year Plan

185 The great importance of rehabilitating Ukrainian industry and the
727 share which Ukrainian industry has to take in the entire Soviet Union economy are shown by the new Five-Year Plan.

By comparing the aims for 1950 with pre-war production figures, it is possible to have some impression of the destruction which occurred in the Ukraine during the war.

The table which follows shows the planned ratio of Ukrainian output in 1950 to the output of the entire Soviet Union. Where possible, pre-war figures have been included.

TABLE XVIII

Share of Ukrainian Industry in Total Soviet Production

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1940

	Ukrainian S.S.R.	U.S.S.R. total	Ukraine (per cent. of total)
	(thousand metric tons)		
Pig iron	9,200	14,900	61
Steel	8,600	18,400	47
Coal	83,800	164,600	51
Tractors (units)	n.a.	176,000[1]	n.a.
Locomotives (units)	880[2]	1,214[2]	72[2]
Sugar	1,790[2]	2,378[2]	75[2]

1950 (planned)

	Ukrainian S.S.R.	U.S.S.R. total	Ukraine (per cent. of total)
	(thousand metric tons)		
Pig iron	9,700	19,500	49.7
Steel	8,800	25,400	34.6
Coal	86,100	250,000	34.4
Tractors (units)	25,000	112,000	22.3
Locomotives (units)	1,000	2,720	40.0
Sugar	1,637	2,400	68.2
Metallurgical equipment	n.a.	n.a.	33.9

1 1938 figure
2 1937 figures

Note: n.a. means not available.

Source: Pravda Ukrainy, Kiev, September 1, 1946; The Five-Year Plan, 1946-50; Russia's Economic Front for War and Peace, A. Yugov, C.A. Watts and Co., Ltd., London, 1941.

Progress in 1946

At the beginning of 1947 the State Planning Commission of the U.S.S.R. issued a statement describing the progress in rehabilitation and development made during 1946. According to this statement the gross output of industry in the entire U.S.S.R. increased by 20 per cent. in 1946 as compared with 1945. About 800 government enterprises had been built, restored, or launched during the year. Navigation was opened on restored canals. A series of steps were also taken in 1946 to expand Soviet trade and consolidate the currency. Wages and salaries of low and medium-paid workers were raised.

SU
464 The number of workers and employees in the national economy of the
874 U.S.S.R. increased by 3 million. Vocational schools and factory
training centres graduated thousands of skilled workers, and improved
the skill of several millions already employed.

SU
727 Of the districts which suffered occupation, economic rehabilitation
433 as well as capital construction amounting to 17,500 million roubles in
1946 made it possible to increase their industrial output by 28 per
652 cent. as compared with 1945. Pravda writes - "the factories, mills,
pits, power stations, towns and villages which were destroyed by the
enemy are being revived one by one...."[1]

In the Ukraine

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727 The Ukraine has been likened to one big building site, where more
than 500,000 workers are engaged in restoring industrial plants and
433 municipal buildings.[2] In the Donets Basin, the coal output of 1946
327 was 50 per cent. higher than that of 1945. In the Ukrainian iron and
steel industry, 21 blast furnaces, 58 steel-smelting furnaces, 60 metal and pipe-rolling mills, and 71 coke batteries were at work by January 1947. Of 104 machine-building factories to be restored, 102 were already producing goods, and mastering the production of improved types of machinery. The Kharkov transport machine-building works was preparing to build long-distance steam engines; and the tractor works was increasing its production, as were many other factories.

U
727 In 1946 the Kharkov turbo-generator works made a 100,000 kilowatt
433 turbine and one of 50,000 kilowatts. At Dniepropetrovsk, a lorry
393 factory was being built; and in Odessa and Lvov, automobile assembly
works were under construction. Great work was also being done in the
398 development of light industry, food processing, chemical works, and
other branches of industry.

U
727 After three years' work of restoration the Dnieper Dam had been
433 rebuilt in the main, and the housing for the power station erected.
377 By the end of 1946 the capacity of Ukrainian power stations had reached
70 per cent. of pre-war.

U
362 Since the liberation over 104.5 million square feet of floor space
368 had been restored in the Ukraine. Over half a million of the
590,000 houses destroyed by the Germans were restored or built anew in Ukrainian villages; and more than 13,000 cultural institutions in the villages and 118,000 auxiliary buildings on the farms.[2]

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[1] Pravda, quoted by Soviet News, London, January 22, 1946

[2] Soviet Monitor, London, January 23, 1947.

Coal

316 The coal centre of the Ukraine is the basin of the Donets River,
433 a tributary of the Don. In 1913 the Donets region was producing 80 per cent. of all the coal turned out in the entire Russian Empire. (23 million tons of the 29.2 million total); and even in 1940, when the production of other coal areas in the U.S.S.R. had been greatly expanded, and many new areas explored and put into operation, Donets mines still accounted for more than half the total output (83.8 million tons of the entire Soviet Union production of 164.6 million).

Since about 70 per cent. of all the fuel consumed in the U.S.S.R. is supplied by coal,[1] the rehabilitation of the Ukrainian coal industry is of tremendous importance to the economy of the Soviet Union.

727 It is now over three years since the Soviet Army drove the Germans
316 out of the Donets Basin. Before their rout, the enemy flooded the mines and burned engineering plants, miners' settlements, and cities. Restoration work was started soon after the liberation of the Basin, but it was estimated that to restore coal output to the pre-war level it would be necessary to pump 650 million cubic metres of water out of the mines and to restore 1,565 miles of mine galleries.[2] Today, the towns of the Donets Basin are a mass of scaffolding, as war-devastated houses, buildings, and roads continue to be repaired. Mine derricks dot the landscape; and water is being pumped in a steady stream from the mine pits. At the Chelyuskin Mine which before the war was one of the biggest and best eqipped in the Donets, over nine million cubic metres of water had been pumped by the middle of December 1946; and about 20 miles of galleries had been restored. Coal output averaged a thousand tons a day.

By January 1947 about 142 major coal mines of the 279 operating prior to the war had been restored, and 430 smaller ones, rehabilitated or built anew, were in operation. Production was nearly half of pre-war.[3]

[362] As regards housing for Donets workers, it is planned within the
next five years not only to restore the houses demolished by the Germans,
but also to build another 20 million square feet of housing space in
the Donets Basin; in 1946 alone over four million square feet of floor
[464] space had been reconstructed. Thousands of miners are being helped
to build their own homes; and measures are being taken to increase
their food supplies.

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[1] Moscow Radio feature, "Sidelights on Soviet Life," cited in Soviet Monitor, London, January 29, 1947.

[2] Soviet Monitor, London, September 12, 1946

[3] Soviet Monitor, London, January 23, 1947

Coal: Plans for the Future

185 Under the Five-Year Plan, the coal industry of the Ukraine is to
433 be speedily rehabilitated and further developed, so that by 1950 its
output will be 86,100,000 tons, including about 6 million tons of
316 brown coal (lignite).[1] When it is remembered that this target is only 2.3 million tons over 1940 production, the enormous task of rehabilitation confronting the industry is made clear. The difficulties are even more accentuated if one compares the increase of coal production in three pre-war years, from 1937 to 1940, when output leaped from 70 million tons to 83.8 millions.

Plans for increasing the future coal output of the Ukraine include not only the restoration of old mines but also intensive prospecting and the sinking of many new shafts.

"Between 1946-50, coal mines with an aggregate capacity of 77,500,000 tons are to be put into operation in the Stalino and Voroshilovgrad regions of the Ukrainian S.S.R.[2]"; and coal fields in other areas are to be further developed. In particular there are to be put into operation in the Donets Basin and in the western regions of the Ukraine, small coal mines and drifts with a total capacity of 4,600,000 tons of coal, and peat briquette plants with a capacity of 50,000 tons.

The lignite mining industry is to be developed and by 1950 is expected to supply annually some 6 million tons of coal. Five lignite mines operating in the Ukraine in 1946 increased their output in October by three times as compared with April.

135 Large coal supplies are expected from the regions west of the
654 Dnieper, where 11 promising coal deposits are located. Prospecting is
in progress there, as well as in the Zlochev, Kremenets, and Kolomya
areas of Western Ukraine, where 28 shafts had been sunk by November 1946.[3]

Industrial lignite deposits have also been found in an area of four square miles between Slavgarod and Sinelnikovo (near Dniepropetrovsk) and in the Transcarpathian region.

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[1] The coal output of the entire Soviet Union in 1950 is fixed at 250 million tons.

[2] The Five-Year Plan, 1946-50

[3] Soviet Monitor, London, November 21, 1946.

727 In August 1941 the retreating Soviet army troops partially disabled 377 the Dnieper Dam and power station to prevent its falling into enemy hands. This destruction was later completed by the Germans. When the Soviet Army recaptured the region, they found that 35 of the dam's 48 piers had been blown up, and all the generators destroyed. Damage to the power house alone was estimated at 500,000,000 roubles.

Reconstruction work began in February 1944, when the war was still on. Three years later the assembly of the first power unit of 72,000 kilowatt capacity was completed; and on March 3, 1947, the Lenin Hydro-electric Station supplied its first post-war currency to the industry of the Dnieper Valley.

There are over 11,000 men and women engaged on the restoration job, which has involved repairing the dam and the underwater structures, building the housing for the power station, and mounting the machines. Another two power units are to be assembled later this year.

After the expulsion of the Germans from the Ukraine, the capacity of the Republic's power stations was only 0.4 per cent. of pre-war. By the end of August 1946 restored capacity had reached 47 per cent. In the Donets Basin 70 per cent. had been restored, and in the Stalino area, 79 per cent. In the city of Lvov (Western Ukraine) the pre-war capacity of its electric power stations had been surpassed by 18 per cent. In the first seven months of 1946 much had been accomplished: some 400 power stations, including 215 hydro-electric plants, had been launched in the Ukraine; and it was expected that 750 more power stations would be completed by the end of the year.

The Five-Year Plan fixes the 1950 output of electric power in the Ukraine at 13,690 million kilowatt hours. The total capcity of Ukrainian power stations is to be increased in 1946-50 by 2,574,000 kilowatts. The Five-Year Plan directs that:-

> "The Lenin Hydro-electric Station on the Dnieper shall be rebuilt. Small hydro-electric power plants with a total capacity of 203,000 kilowatts shall be built to meet the requirements of agriculture and local consumers. Plant aggregating 95,000 kilowatts shall be put into operation at municipal electric power stations."

The restoration of electric power facilities will assist greatly in rehabilitating other sections of the Soviet economy

Iron and Steel

185
327 The Five-Year Plan for the Ukrainian S.S.R. envisages an output in 1950 of 9.7 million tons of pig iron, and 8.8 million tons of steel.

433 In order to accomplish this, the iron and steel plants of the Donets Basin and the Dnieper region are to be rehabilitated; and there are to be put into operation 30 blast furnaces with an aggregate annual capacity of 9 million tons of pig-iron, steel smelting units with a

capacity of 8.4 million tons of steel, and 58 rolling mills with a capacity of 6.5 million tons of finished rolled goods.

In view of the enormous destruction of industry during the war, these aims are heroic, because they in fact mean that for five years the Ukrainian iron and steel industry will be striving to regain and then even to exceed, the production of 1940. This is shown by the following table, which gives the pre-war output of iron ore, manganese ore, pig-iron, and steel, as well as the planned output of the latter two in 1950. Figures for the U.S.S.R. as a whole are also included for comparison.

TABLE XIX

Ukraine: Production of Pig Iron and Steel
(thousand metric tons)

Year	Iron ore		Manganese ore	
	Ukrainian S.S.R.	Whole U.S.S.R.	Ukrainian S.S.R.	Whole U.S.S.R.
1928	4,671	5,700	531	1,200
1932	7,925	12,100	443	1,400
1937	16,414	26,000	957	2,000

Year	Pig iron		Steel	
	Ukrainian S.S.R.	Whole U.S.S.R.	Ukrainian S.S.R.	Whole U.S.S.R.
1928	2,361	3,300	2,409	4,300
1932	3,911	6,200	3,128	5,900
1937	8,801	14,500	8,467	17,700
1940	9,200	14,900	8,600	18,400
1950 (Planned)	9,700	19,500	8,800	25,400

Note: 1940 figures not available for iron ore and manganese ore.

Sources: Socialist Construction, Moscow, 1939; Russia's Economic Front for War and Peace, A. Yugov, C.A. Watts and Co.Ltd., and The Five-Year Plan, 1946-50.

As the table shows, areas of the Soviet Union other than the Ukraine are expected considerably to increase their production during the next several years. This, as well as the complete revival of Ukrainian plants, is particularly necessary to rebuild the transport system, and to replace tractors, machinery, and farm implements which were either stolen or destroyed during the war.

Heavy Industry Building in 1947.[1]

327 727 Reconstruction and building will be on a wider scale in 1947, as many improvements are introduced. Mechanization is being extended in blast furnaces, open-hearths, and metal-rolling shops; and ore and coal stores are being equipped with modern cranes.

In the Donets Basin in 1947 the Stalino Metal Works are to put into operation another blast furnace, marten oven and rolling mill.[2] At the Azovstal works the two blast furnaces of 1,000 cubic metres each will be enlarged to 1,300 cubic metres. Also at the Azovstal works, which in the past did not produce any rolled metal, are being built a blooming mill, which will be the largest in the south, and a rolling mill. New blooming mills and rail rolling mills are also to start at the Petrovsky works in Dniepropetrovsk, and at the Dzerzhinsky works in Dnieprodzerzhinsk. New pipe-rolling workshops will be added at the Nikopol Yuzhno-Trubny and the Dniepropetrovsk works.

At the Zaporozhstal works in 1947 several workshops will be added; and a power station and a 1,300 cubic metre blast furnace will begin working in the first half of the year. Among the most urgent tasks at this plant is the reconstruction of machines producing sheet metal for automobile production.

Equipment for Iron and Steel Mills

According to the new Five-Year Plan, the Ukrainian output of equipment for iron and steel mills in 1950 has been fixed at 35,000 tons; the total production of the entire Soviet Union has been fixed at 102,900 tons (of which 66,700 are to be produced by the Russian Soviet Federative Socialist Republic).

Production of Tractors

727 407 432 Before the war there were about 90,000 tractors in operation on Ukrainian farms. During the occupation, 56,000 of these were wrecked or stolen by the Germans, who also completely destroyed the well-known tractor factory at Kharkov. Because of the particularly great need of tractors in the Ukraine, this factory was rebuilt with great vigour; and production resumed. By February 1947 the Kharkov Tractor Works had produced 3,000 tractors since the restoration of the plant.

The 1950 output of tractors in the Ukraine is expected to be 25,000; for the entire Soviet Union, production has been fixed at 112,000 tractors.

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[1] See U.S.S.R. Deputy Minister for the Construction of Heavy Industry Enterprises, Radio Moscow, February 3, 1947, B.B.C. Digest of World Broadcasts No. 2744, London, February 5, 1947.

[2] Soviet Monitor, London, January 2, 1947.

SU
U

Chemical Industry

135
315 The chemical industry of the Ukraine is based chiefly on coal deposits, but also on a number of other raw materials to be found there, including lacustrine deposits of sodium chloride (Artemovsk area) and phosphatic rocks (Konstantinovka area).

U
The Five-Year Plan fixes that:

[185] "The chemical plants of the Ukraine, including soda, nitrate, and superphosphate plants, shall be rebuilt, and the potash mines in the regions of Stanislav and Dragobych, and a new superphosphate plant, a paint and varnish plant and a plastics factory built.

U
[654] "In 1946-50 geological surveys shall be conducted with a view to locating commercial deposits of potassium salts to a total of 80 million tons, graphite to a total of 7.7 million tons, and gypsum to a total of 7 million tons."

Output in 1950 is fixed by the Plan as follows:

for the Ukrainian S.S.R.

Calcined soda	448,000 tons
Superphosphates	860,000 tons, and
Salt,	1,930,000 tons;

and for the entire Soviet Union:

Calcined soda	800,000 tons, and
Mineral fertilizers, superphosphates, nitrates and potash	5,100,000 tons.

U

Light Industry[1]

727
433 By the end of 1946 the production of consumer goods in the U.S.S.R. had already revived considerably; output in the different branches ranged from 20 to 50 per cent. above 1945. Reconversion of the factories to peacetime production was largely completed; however, three big tasks remained: to complete the rehabilitation of all light industry enterprises wrecked by the Nazis; to replace the old or worn-out machinery; and to obtain an adequate supply of labour and materials.

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[1] Soviet News, London, December 30, 1946, and February 6, 1947.

17: UNRRA G-4 (no date) 1947 RD1 Ukraine RD1
Soviet Union R1

SU
727 A recent decree of the U.S.S.R.'s Council of Ministers was designed
185 to assist the fulfilment of all these tasks. It puts light industries
in the priority class for supplies of raw materials, fuel, electricity,
SU manpower, and workers' housing; and it approves increases of capital
[652] investments in the textile industry from 5,900 million roubles to 7,300
million in 1946-50, and in light industry, from 2,180 to 2,900 million
roubles in the same period.

As a result of these measures, consumer goods output by state-owned enterprises is expected to rise this year (1947) by 50 per cent. and the output of the co-operative societies will certainly increase as well.

Light Industry Rebuilding in the Ukraine

U
228 By January 1947, 58 textile mills had been restored in the Ukraine. Work had been resumed at the Odessa and Sumy textile factories; and the Kharkov textile mill had been restored and considerably expanded. Sometime this year a new textile mill is to be launched in the town of Stryia, Dragobych Region; and in the Izmail Region, the Tatar-Bunary mill will resume operations. Cotton mills are being built in Lvov, Kiev, and Chernovitsy.

U
231 Sericulture has been restored in the Ukraine, where it was begun only ten years before the war. It is to be further developed under the Five-Year Plan, and in the next ten or fifteen years the Ukrainian Republic should become one of the leading silk-producing regions of the Soviet Union. A silk mill is being constructed at Darnitsa, and Kiev silk mills have delivered their first batch of silk.

Pre-War Output of Cotton Cloths[1]

U
288 In 1937 the production of cotton cloths in the Ukrainian S.S.R.
433 amounted to 7.1 million metres (1.2 per cent. of the total output of the Soviet Union), while in 1932, production was only 2.2 million metres (0.08 per cent. of the total Soviet Union production of cotton cloths). The cotton cloths production of the entire Soviet Union had risen from 2,694 million metres in 1932 to 3,447.7 million in 1937.

U
Leather Footwear[1]

282
SU Leather footwear production in the Ukraine in 1937 was 31,226,000
282 pairs of shoes, (17.07 per cent. of the 182,916,000 pairs produced in the whole Soviet Union); while in 1932 the Ukrainian S.S.R. had turned out only 14,535,000 pairs (16.72 per cent. of the Soviet Union total: 86,949,000 pairs)

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[1] Socialist Construction, Moscow, 1939.

Food Industries

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127 The damage suffered by the Soviet food industry during the German
occupation - not counting the destruction of livestock and crops - has
25 been estimated at 17,000 million roubles. Restoration work was begun
U while the war was still on, and by May 1947, 3,200 food factories had
727 been rebuilt. A fairly large proportion of these restored factories
25 must have been in the Ukraine, where, according to the Soviet Monitor[1]
433 1,600 out of 1,822 pre-war food factories had been restored by November
6, 1946. The rehabilitated factories had exceeded their 11 months' food output programme by production valued at 12 million roubles (146 million roubles over the corresponding period of 1945).

Sugar

U
257 Before the war the output of sugar in the Ukraine was as follows.

SU
257

TABLE XX

Pre-War Sugar Production: Ukraine and U.S.S.R.
(metric tons)

Year	Soviet Union total	Ukrainian S.S.R.
1928	1,221,200	1,086,400
1932	826,800	559,700
1937	2,377,500	1,789,800

Sources: Socialist Construction, Moscow, 1939; and Statistical Yearbooks of the League of Nations, Geneva, 1936 and 1939.

The Five-Year Plan establishes that in 1946-50 sugar refineries in the Ukraine shall be restored or built capable of handling upwards of 67,000 tons of sugar beet per day. By 1950, according to plan, the output of granulated sugar in the Ukraine will reach 1,637,000 tons, (in the entire Soviet Union, 2.4 million tons).

Forestry

U
[311] In January 1935 the forest area of the Ukrainian S.S.R. was
313 3,845,000 hectares - about 0.5 per cent. of the forest area of the
entire U.S.S.R.[2] The number of sawing frames in the Republic was 703 out of the Soviet Union total of 6,500 (total capacity, 18.4 million cubic metres).[3] Considering the relatively small forest

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[1] November 11, 1946

[2] Socialist Construction, Moscow, 1936.

[3] Planned Economy, Moscow, 1940, II.

648 to end) only 202,585 gross long tons of UNRRA supplies had arrived in
731 the Ukraine. These consisted mainly of foodstuffs (three-fourths of the entire tonnage); while slightly less than one-tenth was made up of clothing, textiles and footwear; and 67 tons were medical equipment. Despite the urgent need of agricultural and industrial supplies, only 15,336 and 13,249 tons respectively had reached the Ukraine by the end of June.

By the end of January 1947, UNRRA shipments to the Ukraine from all sources amounted to 407,125 gross long tons; and the UNRRA Mission
[504] to the Ukraine reported that 372,796 tons of this had reached Soviet ports. Delays in shipments during December and January were greater than usual because the port of Odessa for the first time in many years was frozen over, and ships lay icebound for days.

The following table shows UNRRA shipments in comparison with the programme.

TABLE XXII

UNRRA Shipments to the Ukraine up to January 31, 1947

	Programme (thousand U.S. dollars)	Shipments to January 31, 1946	
		(thousand U.S. dollars)	(gross long tons)
Food, feed, soap	100,189	94,587	287,519
Clothing, textiles, and footwear	16,856	16,801	15,095
Medical and sanitation	2,326	1,858	373
Agricultural rehabilitation	17,088	14,403	29,070
Industrial rehabilitation	51,591	34,077	75,068
Totals	188,050	161,726	407,125

Source : UNRRA Headquarters, Washington.

Industrial Rehabilitation Supplies

731 As the table shows, 75,068 gross long tons of the total supplies
648 shipped by January 31 were industrial rehabilitation equipment. These supplies have, however, been extremely slow in arriving. Up to the
433 end of June 1946 only 13,249 gross long tons had reached the Ukraine, including United States army surplus equipment of about 20 electric power stations and generators, as well as some raw materials, chiefly rubber, tin, lead, copper and other metals, and welding electrodes. A small number of machines for use in automobile repair shops, and about 90 motor cars and trucks had also arrived; but the slow delivery of machinery to transport materials and process building equipment was a serious defect, since much of the rubble of war damage had been cleared away, and the lack of such supplies was a hindrance to

731 rebuilding. Between July 1, 1946, and January 31, 1947, however,
648 another 38,744 tons of industrial supplies arrived, bringing the
433 deliveries up to 51,993 gross long tons.

The following table shows the composition of all industrial supplies shipped to the Ukraine by the end of January 1947

TABLE XXIII

UNRRA Shipments to the Ukraine of Industrial Equipment up to January 31, 1947

	Thousand U.S. dollars	Gross long tons
Transport and telecommunications	620	949
Public utilities	18,975	27,451
Building repair equipment	5,030	3,209
Machine repair equipment	1,041	527
Miscellaneous consumer goods	307	97
Materials, chemicals, engineering stores	7,930	42,684
	174	151
Totals	34,077	75,068

Source : UNRRA Headquarters, Washington.

Many of the metals which have been received are being used in canning factories or in the manufacture of household utensils and dishes. Pipe supplies (the first shipments of which arrived in December) are being used to replace destroyed water and gas mains. Canvas tarpaulin has been distributed for use in mines and on the farms of the Ukraine. Although these supplies have unquestionably filled some of the needs, the UNRRA Mission reports that the quantities are too small and the task of reconstruction too great for them to make much impact.

About one-third of the industrial rehabilitation programme for the Ukraine consists of so-called "protocol" supplies - that is certain items of industrial equipment which in a previous trade agreement the United Kingdom had contracted to furnish to the Soviet Union. After UNRRA assumed responsibility in the Ukraine and Byelorussia, negotiations commenced for the transfer of this equipment through UNRRA. About the middle of 1946 arrangements were concluded; and it was agreed that UNRRA would take over and deliver these "protocol" supplies as part of the industrial rehabilitation programme. Similarly, UNRRA became financially responsible for those "protocol" supplies which had already been delivered to the Soviet Union for use in Byelorussia and the Ukraine.

By March 1, 1947, about 16,720,000 dollars' worth of "protocol"

731
433 supplies had been shipped to the Ukraine; remaining "protocol" ship-
648 ments to the Ukraine are expected to amount to 923 tons and 784,617 dollars.

Included in these supplies are power stations, pumps, portable cranes, presses, electric locomotives, and electrical and telephone equipment.

Agricultural Supplies

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648 The greater part of the tonnage in agricultural supplies consisted of seeds; by January 31, 1947, 15,669 gross long tons had been shipped. Most of these seeds had arrived in the spring of 1946; however, some of the bags were inadequately labelled, and the contents not easily identifiable. Because of this difficulty the seeds had to be given costly and time-consuming laboratory tests, which delayed distribution. At the same time, 2,600 tons of seeds were reported by the Ukrainian Government to be either diseased or infested with weeds, and therefore unfit for sowing. Negotiations are still in process for the replacement of these defective seeds by suitable types.

[407] As at the end of 1946 the amount of farm machinery which had arrived was small. For example, the UNRRA programme calls for the delivery of 1,600 tractors to the Ukraine, but only 310 had been received by December 31, and these came too late for autumn ploughing. They are being distributed to state owned Machine Tractor Stations for use this spring.

UNRRA shipments have also included 6,692 tons of bagging, 2,090 tons of fishing equipment, and 244 tons of dairy equipment. These are shown in the following table, which summarizes agricultural rehabilitation shipments to the end of January.

TABLE XXIV

UNRRA Shipments to the Ukraine of Agricultural Supplies up to January 31, 1947

	Thousand U.S. dollars	Gross long tons
Bagging	1,672	6,692
Farm machinery	1,517	2,941
Fishing equipment	651	2,090
Food processing equipment	551	1,122
Repair material and hand tools		312
Seeds	9,861	15,669
Dairy and poultry equipment	151	244
Totals	14,403	29,070

Source : UNRRA Headquarters, Washington.

291 In addition to these items, UNRRA has delivered several thousand
731 tons of used clothing and footwear contributed through voluntary
relief organizations in other countries. Most of the contributed
648 supplies are distributed to war invalids or to orphans of the war.

The thousands of pairs of shoes delivered by UNRRA, as well as shoes made in the Ukraine from UNRRA leather, are sold according to a rationing system, with miners and heavy industry workers receiving highest priority. Textiles (also rationed) are sold as piece goods, or are made into garments in Ukrainian workshops for sale to permit holders. UNRRA blankets and comforters are distributed chiefly to hospitals and childrens' homes; and hides and other materials furnished by UNRRA are used in the construction of orthopaedic footwear or artificial limbs for wounded veterans.

731 Food Supplies

241 When the UNRRA Mission first arrived in the Ukraine, no data
were available on the republic's exact food situation. The 1945
433 crops sown in a reduced area, under great difficulties of seed,
262 fertilizer, and implement shortages, had yielded only a fraction of
pre-war harvests. It was expected, however, that Ukrainian farms would produce enough grain to supply the population with bread and cereals until the 1946-47 harvest. UNRRA food supplies were therefore calculated to provide chiefly meats, fats (or equivalents in the form of army rations), and dairy products.

731 Altogether, UNRRA planned to use 100 million dollars of the
262 Ukrainian budget for food. By the end of January 1947, all but
648 5½ million dollars of this had been shipped, as is shown in the
following table.

TABLE XXVI

UNRRA Food Shipments to the Ukraine up to January 31, 1947

	Thousand U.S. dollars	Gross long tons
Grain and grain products	548	3,836
Meat and meat products	30,682	54,245
Fish	4,166	23,640
Dairy products	13,378	33,134
Fats, oils, soap	12,725	41,885
Pulses	615	4,658
Beverages	1,490	3,437
Soup- dehydrated	2,835	9,392
Quartermaster food	27,134	109,055
Other food	206	548
U.S. Dept. of Agriculture surpluses	808	3,689
Totals	94,587	287,519

Source : UNRRA Headquarters, Washington.

731 Most of the UNRRA food supplies delivered to the Ukraine are
262 distributed to ration stores for sale to workers and their dependants.
[443 A large proportion (about 35 per cent.) also goes for communal feeding
265] through dining rooms, health resorts, homes for invalids and the aged,
and dining halls of trade schools. Hospitals, childrens' homes,
maternity homes, and the like also receive a share (around 10 per cent.)
(The food distributed to welfare organizations is delivered free of
charge).

731 Apart from the food which UNRRA supplies, the Ukrainian people
262 are dependent on whatever amounts of local produce may appear on
various markets. According to the rationing system, the farmers are
434 allowed to retain part of their produce to feed themselves and their
dependants, and the farm's livestock; the state then purchases a
certain quota for use in feeding the non-farm population. If any
surplus then remains, the farmers may keep it, or sell it on the free
market at uncontrolled prices.

241
433 In practice, however, because of the extremely poor harvests in
the last two years, Ukrainian farmers have scarcely been able to feed
434 even themselves; and the amounts of domestically produced food which
reach the ration stores or the free market have consequently been
small.

The following section describes the sources of food supply open to the urban consumers.

The System of Food Distribution

443 In the cities of the Ukraine there are three outlets through which
434 foodstuffs reach the population:

364 (a) the ration stores, where the bulk of foodstuffs are sold
262 at fixed prices to ration-coupon holders;

(b) the so-called gastronoms (commercial stores) where scarce, luxury items are sold; and

(c) the public markets, where collective farmers and peasants bring their surplus produce for sale.

Most of the rural areas and villages of the Ukraine are expected
to produce locally enough food to feed the inhabitants; and as they
are nearly all considered to be self-supplying, they receive through
the central distribution system only sugar and sometimes bread.
Their surplus farm produce (that is, food in excess of that needed
for feeding people or livestock on the farm and not subject to
collection or purchase by the state) is usually brought by the
farmers to the public markets for sale to the urban population.
[435] The quantities of produce and the variety of items available in the
free public markets vary greatly from season to season and from
day to day; Prices are equally unstable.

443 11.6 roubles a kilogram. Butter, which was almost never available,
435 in the ration stores at 24 roubles a kilogram, and in the public
262 markets, at 150. The price of sugar in the public markets was, on
July 10, four to five times the ration store price.

443 In addition to these products for which there are comparable prices
in the ration stores, the public markets also offered certain foodstuffs
262 which were seldom or never available in the ration stores. In the
433 public markets of Kiev dressed beef was selling for 70 roubles a kilogram on June 3, 1946, and 60 roubles on July 6; milk, which on June 3 brought 15 roubles a litre was selling for 12 to 14 roubles on July 6. The fall in the price of tomatoes illustrates the play of demand and supply; when the first fresh tomatoes arrived on the public markets, they brought 15 roubles for each small tomato; by the end of July the price had fallen to 3.5 or 4 roubles for large size tomatoes of the best quality. Similar price reductions occurred in other vegetables and fruits; in each case, however, prices were still extremely high; even when the crops had been harvested, the demand remained far greater than the supply.

The extent of the shortages may be gathered from a report by the UNRRA Mission in June 1946, when a tour of Kiev's two great public markets revealed only one pound of meat, several fowls, small quantities of milk and butter from nearby farms, fifteen small sausages being sold from one can, and a few miscellaneous titbits such as matches, cigarettes, and candy from a ten-in-one ration.

Present supplies are even more attenuated. Ration scales have been cut, and this naturally increases the demand for supplies in the public markets. As the demand grows and supplies dwindle, prices rise even higher. The next table compares free market prices in June 1946, July 1946, and January 1947.

TABLE XXVIII

435 Ukraine: Food Prices in a Typical Public Market
(in roubles)

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	June 1946	July 1946	January 1947
Bread, kilo	22.5	23.0	50.0 - 55.0
Meat "	about 60.0	70 - 100	60.0
Fish "	-	-	65.0
Milk, litre	16.0	15.0	16.0
Butter, kilo	190.0	190.0	230.0
Eggs, dozen	42.0	48.0	-
Cereals (various) kilo	-	50.0	-
Sugar	-	100.0	-
Vegetable oil	-	200.0	200.0

- Very little or none on sale. Supplies vary greatly but are never very large.

Source: UNRRA Mission to the Ukraine, Kiev.

UNRRA Supplies and the Food Situation

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[433] Until the produce from local farms became available in the spring and summer of 1946, the diet of the urban population of the Ukraine depended principally, apart from bread, on UNRRA food supplies, which in the beginning consisted almost entirely of U.S. army rations, plus some dried and evaporated milk and tushonka. Urgently needed fats and oils were slow in arriving; up to May only 8,596 tons had been received in the Ukraine. The shortage was critical, since domestic production was providing a rate of only 4 to 5 kilograms of fats a year per person, as compared with 12.8 in 1940 and 22 kilograms in 1929.

262
434 Very little food was being received from other parts of the Soviet Union, and a protracted dry spell was threatening the 1946 harvest. Official rations for almost all categories of consumers were low;

262 [434] For example, light workers were entitled tononly [1] 1,820 calories[1] a day from rationed foods, and office workers, only 1,236. Supplementary non-rationed foods were obtainable, but only in limited quantities and at high prices.

262 433 461 The inadequate diet which everyone had been receiving since the war was undoubtedly responsible for lowered work efficiency, and added to the shortage of machinery and equipment, for delayed reconstruction. For example, although up to October 1946 heavy workers were entitled to official rations providing 3,757 calories a day, the greater part of their diet consisted of bread and cereals. Because of the great livestock shortage, there was scarcely any meat available on the ration. Fairly typical was the situation of 13,000 workers engaged in rebuilding the Ukraine's largest steel mill at Zaporozhie, who during April 1946 received only 750 grams of fat (about 26½ ounces) and less than two pounds of meat per person, a diet clearly inadequate for heavy labour.

262 758 Patients in a Kremenchug hospital received a diet composed chiefly of bread, cabbage soup, and 15 grams of butter or lard, which provided about 1,200 calories daily - a level radically below the emergency subsistence rate of 1,900 calories defined by the Food and Agriculture Organization of the United Nations.

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[1] Compare all caloric rates with the emergency subsistence food consumption levels defined by the Food and Agriculture Organization of the United Nations as the minima necessary to prevent serious malnutrition leading to disease and the danger of civil unrest. For European countries, these levels are as follows:

Emergency Subsistence Caloric Intake

Category	Calories per day	Category	Calories per day
0 - 2 years	1,000	Normal consumers (male)	1,900
3 - 5 "	1,250	Sedentary (female)	1,600
6 - 9 "	1,500	Moderate workers	2,000
10 - 17 years	2,000	Heavy workers	2,500
Pregnant and nursing women	2,000	Very heavy workers	3,000

[1] [SIC--ANALYST]

262 On the farms of the Ukraine the diet, although in some respects better, was for the most part, restricted and monotonous; bread and cabbage soup were the staple items; meat consumption was negligible and the intake of fats and oils, well below a pound a month per person.

262 731 433 The present situation compared with the spring of 1946 is much worse. UNRRA food deliveries to the Ukraine are all but completed. The 1946-47 harvest on which so many hopes were set, proved a dismal disappointment; and other areas of the Soviet Union, having been similarly affected by the drought, are not in a position to give assistance. Domestic stocks must therefore last until the next harvest; and the outlook until then is bleak.

434 262 On October 1, 1946, because of the shortage of domestically produced food and the imminent cessation of UNRRA supplies, Ukrainian rations for all categories of consumers had to be reduced. For most people this meant either that their cereal ration was cancelled, or that their bread quota was lowered or both.

For example, heavy workers, light workers, and employees, - although still receiving the same amount of bread, are no longer entitled to the cereal ration of 2.0, 1.2, and 0.8 kilograms a month respectively. Dependents fare even worse: not only have they lost their cereal ration, but in addition, their bread quota has been cut from 9 to 7.5 kilograms a month. The bread ration for children also has been cut from 12 to 9 kilograms, and their meat from 0.4 to 0.3 kilograms; however, they still receive the same cereal ration as before (0.8 kilograms a month).

Rations for mothers vary of course, according to the occupational category; but their special allowances remain the same, providing approximately 745 extra calories daily.

In terms of calories, these bread and cereal cuts have reduced the diet of heavy workers from 3,757 calories a day to 3,527; light workers are down from 1,820 to 1,682; employees from 1,236 to 1,144; dependents from 895 to 704; and children up to 12, from 1,209 to 973.

[737] 000 The following table shows the ration scales now in effect. Six out of about twelve groups have been chosen to show typical differentiations. Special groups - for example, tuberculosis patients in institutions - have not been included. It should be noted that dependents are defined as those who are not working and who have passed the age of 55.[1] Mothers usually work and draw, throughout their

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[1] Previously the age was 45 years; but it has been raised in an effort to get all non-producers to work.

24: Cech and Mellon S-2 (no date) 1944 Ukrainians-Ruthenians

— CZECHOSLOVAKIA

511 Economic development was essential to a country where bread used
433 to be a delicacy and meat or salt a luxury. The Land Reform intro-
duced in the whole of the Republic in 1919 was a right step in this
185 direction, although the standard of living among the peasant population in the mountainous districts still left something to be desired even during the last years of the Republic. Industrial development, too, was promoted, and 459 factories (timber, food, stone, earthenware, glass, chemicals, electricity, metal, paper) sprang up on Ruthenian territory during the twenty years of freedom. An important factor in the industrial development was the electrification of the country which before 1918 had hardly any electricity. Better road and rail communications, too, assisted in Ruthenia's gradual progress.

The work done in Carpathian Ruthenia under the Republic was a promising beginning. The regrettable setback due to the re-occupation of the country is likely to remain a mere episode. For the resistance of the population and the struggle of the partisans indicate that the Ruthenians are aware of their mission as a free people and that they wish to continue on the path of progress on which they embarked when they decided to become a member of the Czechoslovak Republic.

23: Shabad N-4 (no date) 1951 Rl Soviet Union Rl
Ukraine RD1

and Czechoslovakia (1945) that most Ukrainians of eastern Europe be- SU 631
came united into one territorial entity. U

The present administrative-territorial system was introduced into the 631
Ukrainian SSR in 1932 by the creation of seven oblasts. By 1939 the
number had increased to fifteen. Following the partition of Poland, in
1939, and the annexation of the Western Ukraine to the Ukrainian SSR,
six more oblasts (Volyn', Rovno, L'vov, Drogobych, Ternopol', and
Stanislav) were added. In 1940 Rumania ceded Bessarabia and Northern
Bukovina to the USSR. The extreme northern and southern sections of
the territory were incorporated into the Ukrainian SSR as the Cher-
novtsy and Izmail oblasts in view of their predominant Ukrainian popu-
lation. However, the Ukraine lost the greater part of Moldavian Autono-
mous SSR (formed in 1924) when the Moldavian territory was joined
to the central part of Bessarabia to form the newly constituted
Moldavian SSR. Seven districts (rayons) of the Moldavian Autonomous
SSR, including those of Balta and Kotovsk remained in the Ukrainian
SSR as part of the Odessa Oblast, due to the predominance of a
Ukrainian population. In 1945 the western frontier of the Ukrainian SSR
was changed in favor of Poland with the adoption of the so-called
"Curzon line," which left the city of Przemyśl (Russian *Peremyshl'*)
and areas to the northeast and southwest, along the San River, to Poland.
In June, 1945, the Carpatho-Ukraine, or Ruthenia, was transferred
from Czechoslovakia and constituted into the Transcarpathian (*Zakar-
patskaya*) Oblast. At present the Ukrainian SSR is divided into twenty-
five oblasts. SU

The economy of the Ukrainian SSR combines a rich agricultural de- 438*
velopment with a powerful mining and metallurgical industry, based in U
particular on the coal of the Donets Basin and the iron ore of Krivoy 438
Rog. As a result of the industrialization of the USSR, the Ukraine be-
came not only a basic grain-exporting region of the USSR, as well as
an area of intensive agriculture and agricultural industry, but also the
major coal and metallurgical base and heavy-machine construction cen-
ter of the USSR. The Ukraine has more than one fifth of the total sown
area of the USSR and produces one quarter of the grain, two thirds of
the sugar, three fifths of the coal and pig iron, one half of the salt and SU
about one fifth of the machines and chemicals. U •

In 1940 the Donets Basin furnished 85 million tons of coal per year. 316
It supplied not only all the industry of the Ukraine itself but also the 433

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316 metropolitan areas of Moscow, Leningrad, and other industrial centers,
433 as well as the entire southern rail network of the USSR west of the
U Volga and south of the Moscow coal basin. During the period of the
316 German occupation of the Ukraine (1941–43), the coal mines suffered
433 greatly. At present, reconstruction work is in full swing, mines are being
reestablished, and it is hoped to have reached prewar production by the
end of the post-war Five-Year Plan. The major coal-mining centers are
Stalino, Yenakiyevo, Gorlovka, Kadiyevka, Chistyakovo, Krasnyy Luch,
and Sverdlovsk. Anthracite, used principally for fuel, is mined in the
eastern and the southern sections, while coking coal is produced in the
SU western and the northern parts of the Donets Basin.

327 The giant iron and steel mills of the Ukraine lie mainly in the western
433 part of the Donbas, that is, in the coke-supplying area, in the Krivoy
U Rog iron basin, and along the Dnieper between these two raw-material
327 sources. Among the mills producing over one million tons of pig iron
433 per year are modernized prerevolutionary plants at Makeyevka (Donbas),
and at Dnepropetrovsk and at Dneprodzerzhinsk on the Dnieper
and new plants at Krivoy Rog, Zaporozh'ye, and Zhdanov. The Azovstal'
mills at Zhdanov use Kerch' (Crimea) iron ore, which is shipped across
SU the Sea of Azov.

392 Machine construction has been developed to a very large extent in the
438* Ukraine in recent years. Due to the close proximity of the sources of
U metal and in view of the lack of skilled local labor, the Ukraine was designed
392 to produce types of machinery requiring little precision work,
438 but large amounts of metal. Plants located in the Donbas specialize in
heavy machine construction; among them, Kramatorsk produces coal-mining
and steel-milling machinery, and Voroshilovgrad has a large locomotive
works. Agricultural machinery plants are located along the
Dnieper and on the right bank. Khar'kov possesses a large tractor plant
and locomotive works and produces hydro-turbines and electric motors.
There are car-building works at Nikolayev and Dnepropetrovsk, shipyards
at Nikolayev, Kherson, and Kiev, and oil-drilling machinery is
SU made in L'vov.

381 The industrial picture of the Ukraine includes a number of factors
438* suitable for the establishment of a strong chemical industry: the by-products
U of coking and metallurgical processes, the presence of such important
381 raw materials as salt and phosphorites, the availability of cheap
438 energy produced by coal-fed (*Zugres* and *Shtergres*) or hydroelectric
(*Dneproges*) power stations, and finally the need for chemical products